AMSTRAD COMPUTER USER

THE OFFICIAL AMSTRAD CPC

JUNE 1990
£1.45



MOTORCYCLE MANIA

PULL OPEN THE THROTTLE AND KICK INTO TOP GEAR WITH THE CYCLES

COOLCATS COMPETITION

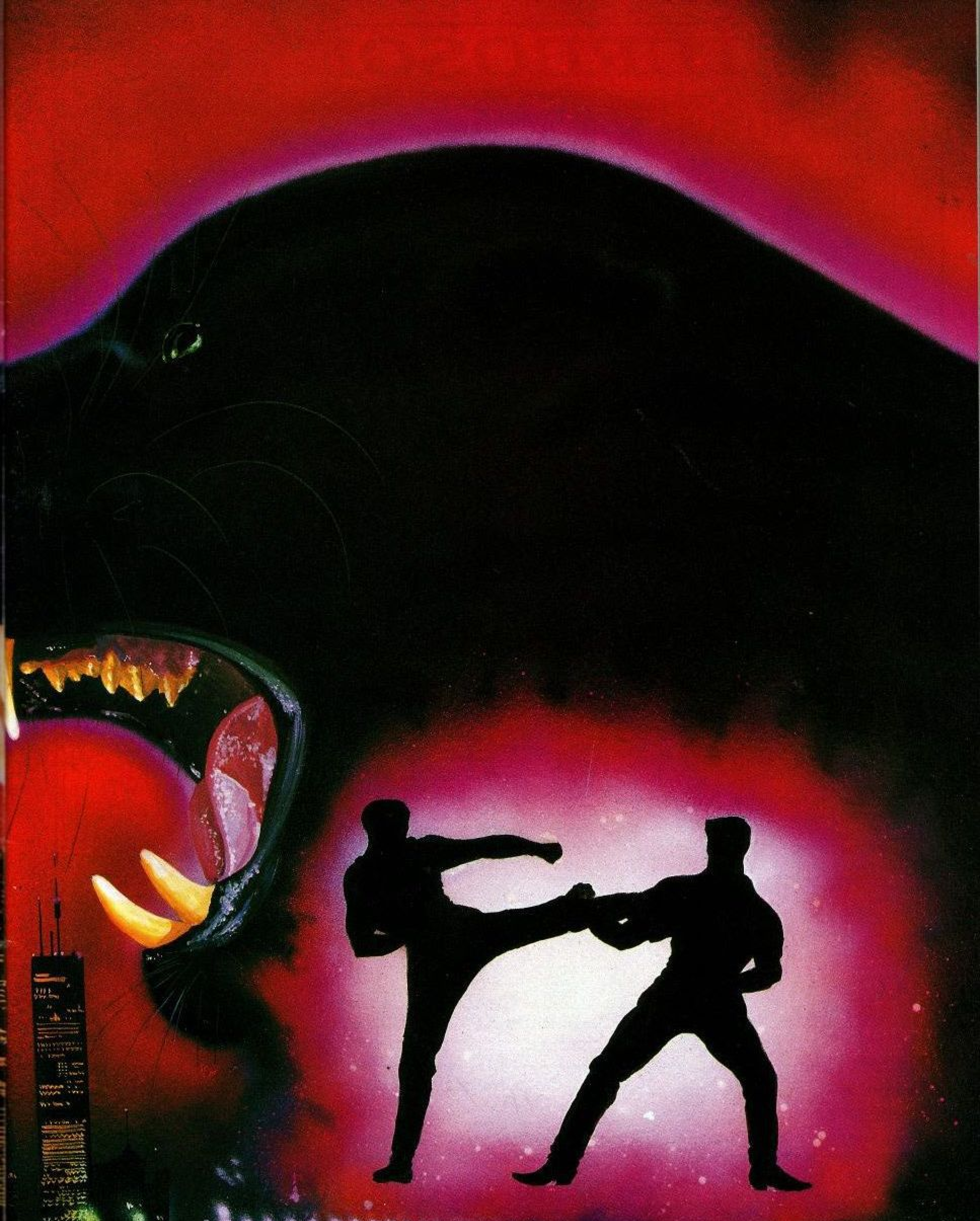
WIN A SUPERCOOL 'BIKING JACKET

PLUS...

WE CONTINUE OUR THREE-PART EDUCATION INVESTIGATION AND REVEAL WHAT NANCY AT CHASE HQ REALLY LOOKS LIKE

ISSN 0952-3049
06
9 770952 304013


SCREENSHOTS FROM AMIGA VERSION
WILD STREETS
TITUS TM
UNIT 4 STANNETS LAINDON NORTH TRADE CENTRE BASILDON ESSEX SS15 6 DJ - PHONE : (0268) 541 126
© TITUS 1989, WILD STREETS, TITUS AND THE TITUS LOGO ARE REGISTERED TRADEMARKS OF TITUS SOFTWARE CORP.



Avralite Publications Ltd
A division of MCPC Ltd.
Panini House 116-120
Goswell Road,
London EC1.
Tel: 071-490 7161

Editor
Chris Knight
Group Technical Editor
John Taylor
Reviewers
Marc Jones
Columnists
John Cook
Vyk Olliver
Phil Craven
John Kennedy
David Dorn
Designers
Paul Ellis
Adrian Hulf
Illustrator
Julian Sharp
Advertising Manager
Georgia Kats
Production Manager
Jayne Penfold
Production Assistant
Michelle Evans
Subscriptions
TIL
PO Box 74
Kent
TN12 6DW
Tel: (089283) 4783
Yearly rates:
UK £17.40
Europe £24.20
Middle East
£24.50
Far East £27.10
Rest of the World £25.00
USA $41.65
Distribution
SM Distribution
Tel: 01-677 8111
Colour and Mono Origination
Ebony
Heathlands Industrial Estate
Heathlands road
Liskeard
Cornwall
Tel: 0579 46880
Published on 1st Thursday of month preceeding cover date

REGULARS





FEATURES

ZIGGY'S MAILBOX



Proofed

First of all, I think that your magazine is very good, but I have a problem. I have typed out Whack Attack and Tower of Brahma from your 10-liner section on my new CPC 464 and, try as I might, all I get is 'Syntax error in line 10'. I have looked at the books all over and can't find where I have gone wrong, so come on you lot, help me out please.

D. C. Perkins, Esher Road, West Bromwich, West Midlands B71 1QX

ACU: It's those dreaded proofcodes again isn't it? When you are typing in a program, you should remember to omit the two letters or digits in the square brackets at the end of each line. These are the proofcodes which assist in error checking, but do not need to be typed in. So many people have written in with this problem that we are tempted to remove the proofcodes from shorter programs like the 10-liners. What do you think?

Humble

I have a humble suggestion to make for your Gameplan section. More and more games these days seem to be of the multiload variety. No matter how incredible and amazing a game might be to the reviewer, it can still be a pain in the neck if you have bought the cassette version.

With this in mind, a simple note in each review could tell your readers whether the disc version would be a more suitable choice. If Gameplan did this, it would be a first since no other CPC magazine has this facility.

Stephen Bowden, Hayes, Middx

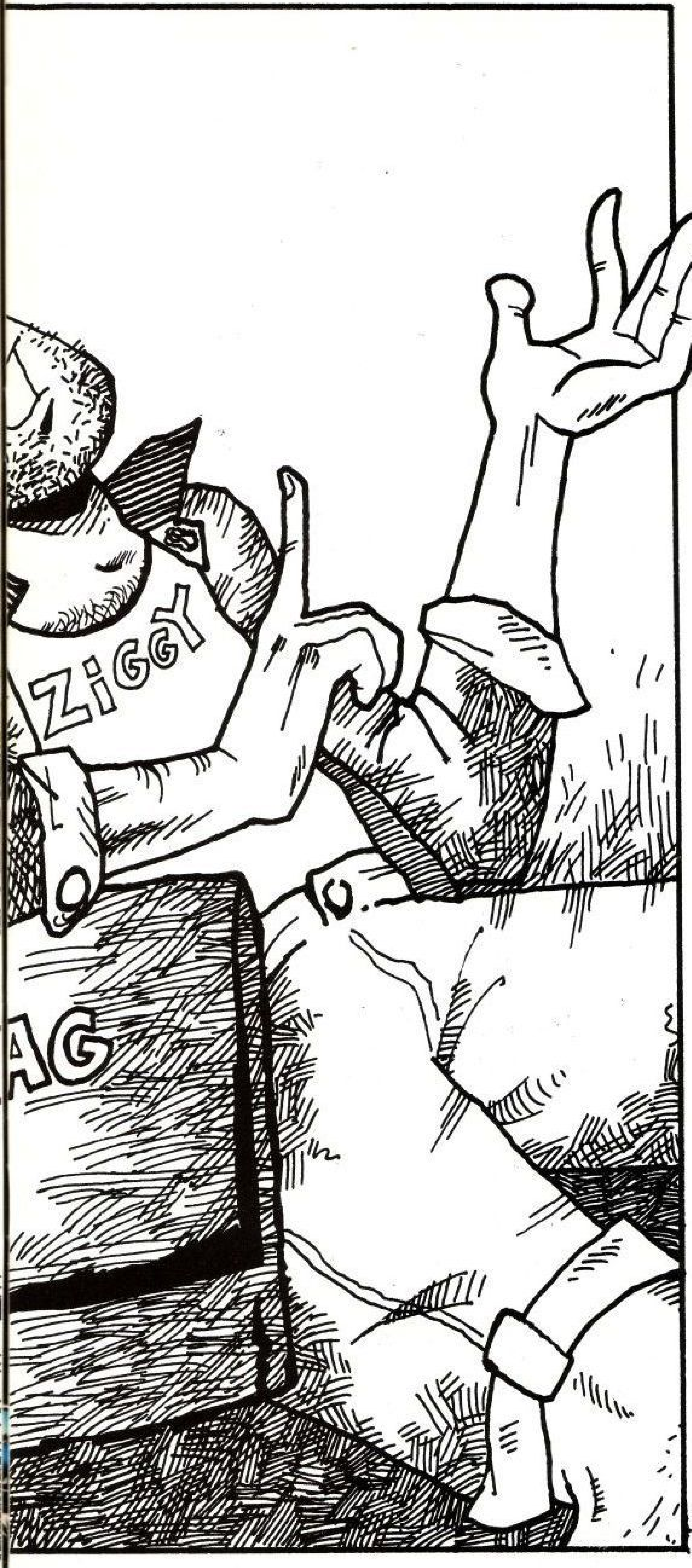
ACU: Sounds like a reasonable idea to us, but on the other hand, we don't want to put our legions of 464 readers off buying otherwise good games just because of the loading time. Write and give us your views on the multiload front.

Speech mode

Please can you tell me if there is a Teletext decoder to produce teletext on a CPC 464. I know that the BBC range of computers produces the Ceefax service, but colours on the 464 are limited. If there is one available, where can I get it from? Also, there is an advert in ACU for a speech facility. Can you tell me what this is as I am very puzzled. Finally, in the April issue, there was an article on a clock-radio for under £10. The CT1 is available from Parker Franks in Kirkgate in Wakefield, reduced from £15 to just £5.99.

Mark Hopwood, Wakefield, West Yorks, WF2 8NF

ACU: As far as I know, there is no such decoder for the 464, but I'm sure somebody out there can help you out. The speech facility you mention is a program which you can use with your tape deck to synthesise your own, or recorded voice and is available from Datel Electronics (0782 744707). Good for you, it seems like you found a bargain at Parker Franks.



Bionic blues

I have an Amstrad 6128 and I am trying to build a robot but I cannot find the address of the I/O ports. I decided to write to ACU to ask if anyone could help but all that happened was that I got a phone call saying: "Sorry, but we cannot release that information", which roughly translated means: "We haven't got a clue". So, can anyone help me please?

C. Crawford, Leyton, London E10 7HR

ACU: We do aim to please, honestly. If we ever find who took that call we'll have him flogged. Seriously though, Amstrad has assured me that all the information you need is in the service manual which you can order directly from CPC Spares by ringing 0772 555034

Brunning again

Just to echo the Brunning/Brunword fan club – me too! I have just upgraded to a PPC 5125 and although Mini Office Professional got me off to a good start, I really miss my Brunword and Infoscript. Might not Brunning consider the effort of producing an MS DOS compatible Brunword, as they certainly have great loyalty from many CPC owners who are inevitably going to upgrade one day, (when Arnold is finally laid to rest?).

Nic Walters, HQ 4, Armoured Division, BFPO 15

ACU: Fine sentiments indeed.

Drive-in

I have a CPC 464 and am thinking of getting a disk drive. Does it affect the graphics or do they stay the same?

Daniel Baron, Barrow Avenue, Carshalton Beches, Surrey SM5 4NY

ACU: Well, if you were to get hold of some really rare Super 3D glasses and looked at the screen from an angle of 37.5 degrees to the vertical... No, only joking. The graphics will not be affected at all and will produce the same brilliant hues we CPC addicts have come to know and love.

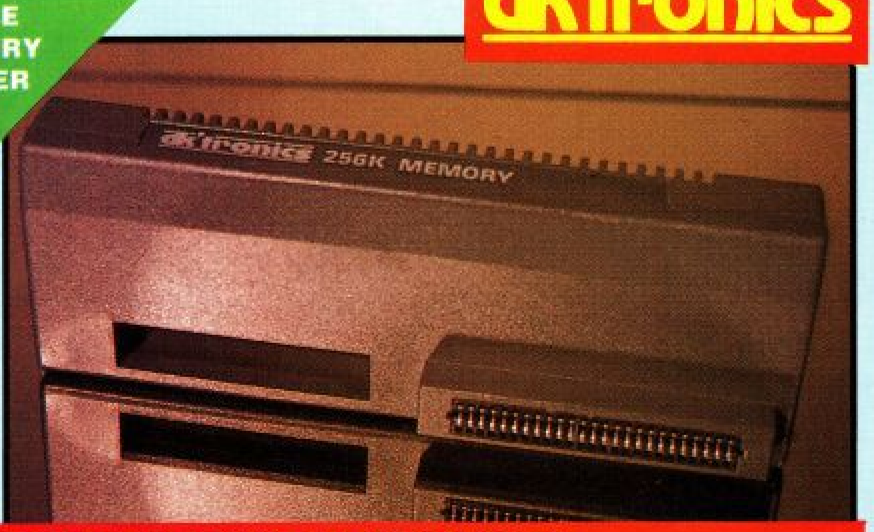
DATEL ELECTRONICS

dk'tronics

MORE MEMORY POWER

dk'tronics





64K AND 256K MEMORY EXPANSION

- Simple plug in memory expansion gives instant extra memory.
- Features bank switching software for easy use by the programmer or for use as a data storage area.
- The software also features some extra BASIC commands.
- 64K unit expands 464 to 128K. The 256K unit takes your 6128 to a massive 320K!!
- 64K unit brings 464 up to CPC 6128 memory configuration making a much larger software base available. Will work straight off with many programs designed for this unit (including OCP Art Studio - see Ad.).
- Ideal for use with the CPM 2.2 etc.
- All bank switching done automatically by supplied software (cassette 464 - disk 6128).

THE TOTAL SOLUTION TO YOUR MEMORY EXPANSION NEEDS!!

ONLY £49.99
64K FOR 464
ONLY £99.99
256K FOR 464 OR 6128 (PLEASE STATE)

MIDI COMPATIBLE



FREE MICROPHONE AND HEADPHONES!

RAM music machine

The RAM Music Machine is probably the most exciting music add-on available for any computer.

- It's a full sound sampling system allowing any sound to be recorded digitally into computer RAM. Once stored the sound can be replayed at different pitches with many varying effects.
- It's an echo chamber & digital delay line.
- Various sampled sounds are provided to get you going.
- The Music Machine can be used as a drum machine - eight drum sounds are provided, but you can easily produce more of your own.
- The powerful software allows you to compose tunes from individual bars of music. You can edit on screen & Save/Load sounds, instruments & rhythms.
- The Ram Music Machine supports full MIDI In, MIDI Out & MIDI Thru.
- Output through your Hi-Fi or Headphones. Comes complete with Microphone.
- Use a full size MIDI keyboard to play the Music Machine.
- Sounds produced by the Music Machine can be mixed with a MIDI Synthesiser's own sounds.
- On screen Sound Editor can produce MIDI data from your own compositions.
- No other product can offer so much in one unit - it's the total solution!!

ONLY £49.99 (Cassette)
ADD £5 IF DISK REQUIRED

SPEECH SYNTHESISER & STEREO SOUND BOOSTER

NEW LOW PRICE



dk'tronics

- This easy to use Speech Synthesiser includes a powerful Stereo Amplifier and two Pod Speakers which are an enormous improvement on the sound supplied by the internal mono speaker.
- Speech output is monorial but directed to both speakers. Booster gives stereo to computer internal sound output.
- Using the SPO/256 Speech Chip the unit has an almost infinite vocabulary.
- Text to speech software is provided in ROM to make speech output simplicity itself.
- Voicing is transparent to the user and the computer can carry on with other program tasks.

ONLY £29.99
464 or 6128 (Please state which)

dk'tronics



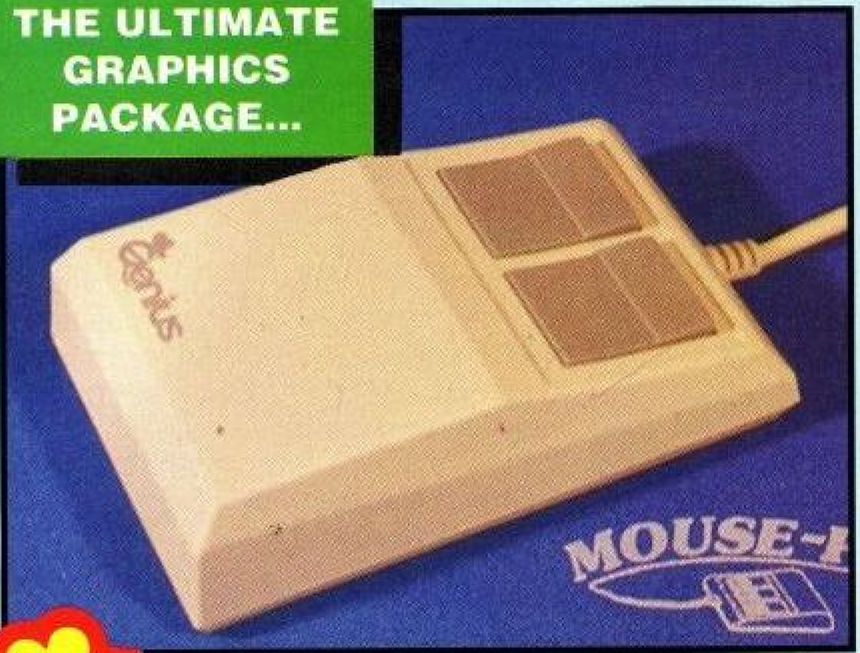
LIGHTPEN/GRAPHICS SYSTEM

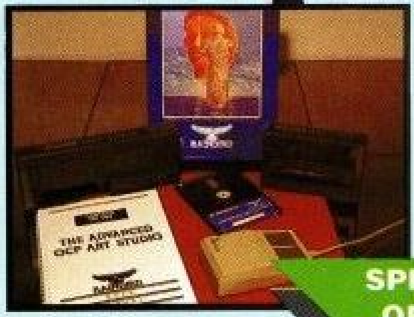
- Complete Lightpen and graphics system lets you create a whole range of effects on screen.
- It can magnify, shrink, colour fill and create circles, rectangles, lines and curves.
- Pictures can be edited at pixel level using a scratch pad which is magnified to full screen.
- Picture storage and retrieval, and a pen calibration feature.
- Printer dump utilities for Epson/Amstrad printers supplied (on cassette).
- Complete package - no more to buy.

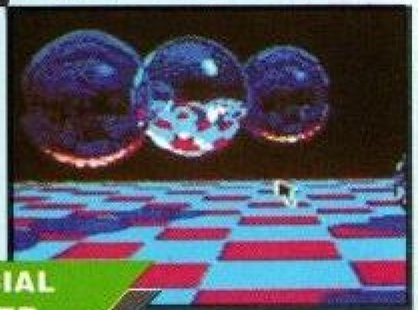
ONLY £14.99
CASSETTE
OR £24.99
WITH SOFTWARE ON ROM - NOTHING TO LOAD
464 or 6128 (Please state which)

DATEL ELECTRONICS

THE ULTIMATE GRAPHICS PACKAGE...

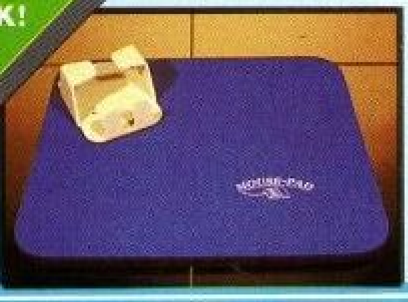






SPECIAL OFFER PACK!





OCP

Genius Mouse

COMPLETE WITH

ADVANCED ART STUDIO™

TAPE OR DISK FOR 464 OR 6128
(PLEASE STATE WHICH REQUIRED)
N.B. 464 NEEDS DK' 64K RAM PACK

ONLY £49.99

TOTAL PACKAGE INCLUDES MOUSE, INTERFACE, ADVANCED ART STUDIO, MOUSE MAT AND HOLDER

- **Genius Mouse is a high resolution two button mouse featuring optical counting, teflon guides, microswitches, rubber coated ball and high quality interface.**
- **When combined with OCP Advanced Art Studio this graphics package is quite simply the best system available. The features are unmatched...**

- Create an image - shrink it, expand it, move it, rotate it, copy it, colour it etc., etc.
- Spray patterns or shades, make elastic lines - stretch and manipulate shapes.
- Zoom in to add detail in fine mode.
- Pulldown/Icon driven menus for ease of use.
- Mouse operation, plus joystick and keyboard control.
- 16 pens, 8 sprays, 16 brushes - so flexible anyone can create superb graphics easily.
- Full cut and paste facilities plus excellent printer support.
- Pixel edit, font editor, flip, invert, rotate, solid or textured fill and professional manual make Advanced Art Studio simply the best graphics package.



COMPLETE WITH MOUSE INTERFACE

- The Genius Mouse Graphics System comes complete with the special Mouse Interface to allow super smooth control.
- Attractively styled to match your 464 or 6128 design and colour.
- Simply plugs into Expansion/ Joystick Port.



FREE!

MOUSE MAT AND MOUSE HOLDER

(WORTH £12.99)

WITH EACH PACKAGE

ONLY WHILE STOCKS LAST

A TOTAL GRAPHICS PACKAGE

SAVE OVER £25

- NO OTHER GRAPHICS PACKAGE CAN OFFER SO MUCH AT SUCH A PRICE!!
- OCP ADVANCED ART STUDIO ALONE NORMALLY RETAILS FOR £25.00. THE MOUSE SYSTEM HAS A NORMAL PRICE OF £39.99. NOW YOU CAN BUY BOTH FOR ONLY £49.99 AND GET A MOUSE MAT AND HOLDER (worth £12.99) ABSOLUTELY FREE.
- WE HAVE LIMITED NUMBERS OF THESE PACKS - SO BUY NOW!

WHAT THE MAGAZINES HAD TO SAY...

AMTIX
"CLASSIC"

C.T.W.
"PICK OF THE WEEK"

AMSTRAD COMPUTER USER
"BEST UTILITY OF THE YEAR"

ALL ORDERS NORMALLY DESPATCHED WITHIN 48 HRS

HOW TO ORDER ...

BY PHONE	BY POST	FAX
0782 744707 24hr Credit Card Line	Send cheques/POs made payable to "Datel Electronics"	0782 744292 UK ORDERS POST FREE EUROPE ADD £1 OVERSEAS ADD £3

PRICES AND SPECIFICATIONS CORRECT AT TIME OF PRESS AND SUBJECT TO CHANGE WITHOUT NOTICE

CALLERS WELCOME - Please reserve goods by telephone prior to visit.

DATEL ELECTRONICS

DATEL ELECTRONICS LTD., FENTON INDUSTRIAL ESTATE
GOVAN ROAD, FENTON, STOKE-ON-TRENT, ENGLAND.

SALES ONLY 0782 744707

TECHNICAL ONLY 0782 744324



DISCS AWAY

Yes you've guessed it. It's time to announce the lucky winners of our March Codemaster's competition, with a super Discman as first prize.

The answers to the three simple questions are:
1. Codemasters was founded in 1986.
2. The cost of each game on the CD disc is 66.5p.
3. TV's Cartoon Time is hosted by Rolf Harris.

And now for the goodies. Andrew Learoyd of Bramley in Leeds was the first name pulled out of the bulging sack and for his efforts, he will get the groovy Discman.

The great second prize of thirty games from the CD Games Pack on cassette format goes to P. L. Curgenven of Padstow in Cornwall, and have a browse through the following ten names to see if you've been lucky enough to win one of the giant runners up posters; Stephen Robinson of Hexham, Northumberland; M. Haddon of Yeovil; Alex O'Mahony of Fordingbridge, Hants; P. Kings of Gosport, Hants; Kyle Smith of Stoke-on-Trent; James Christie of Bracknell; Darryl Bligh of Stratford-upon-Avon; J. Smart of London; Mark Sinclair of Edinburgh, and last, but not least, Jason Rayfield of Gravesend, Kent.

Sorry we can't give prizes out to everyone, but, going by the number of entries, if we had we'd have been licking stamps till the cows came home.

ELECTRONIC MOVES

Mail Order and Trade electronics specialists Greenweld Electronics have announced a move to new premises in Southampton. Along with a whole host of electrical equipment, Greenweld also stock computer software and hardware at very attractive prices. The new trading address is:

Greenweld Electronics Ltd
27 park Road
Southampton
SO1 3TB

GREENWELD
ELECTRONIC COMPONENTS

For more information and details on stock, contact Peter Green on 0703 236363.

WILD KNIGHTS

That's it, this time they've finally gone right round the bend in Putney. You guessed it, it's those seekers for damsels in distress from Domark out to celebrate the launch of Castle Master, their latest epic produced in cooperation with Incentive.

'Sir' Dominic Wheatley and his knightly assistant Ian Andrew went down to Fulham Palace Church to battle over the fair hand of the beautiful Princess Mark, (or so they tell us); the knights' outfits were actually used in "Monty Python and the Holy Grail", (alright, we can buy that); the Princess outfit is really Mark's nightie? Now, that's going to take some believing. Look out for Castle Master very soon.





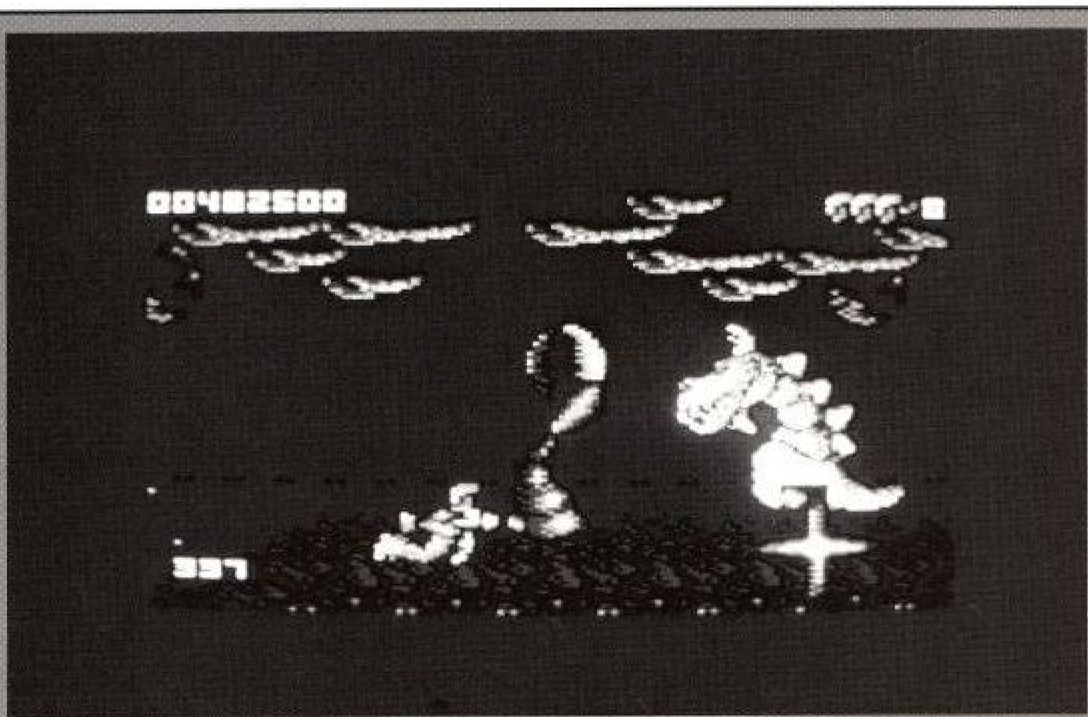
INFRAJOY

London based Spectravideo is set to give seasoned gamesters more power to the old shooting elbow with the release of its new IR infrared joystick. Signalling the user's movements through the air by infrared rays, the Quickjoy Infrared can work from as far away as thirty feet from the computer without wires.

The joystick is supplied with a control box, which must be plugged into the back of the computer, and signals are beamed from the joystick to the control panel.

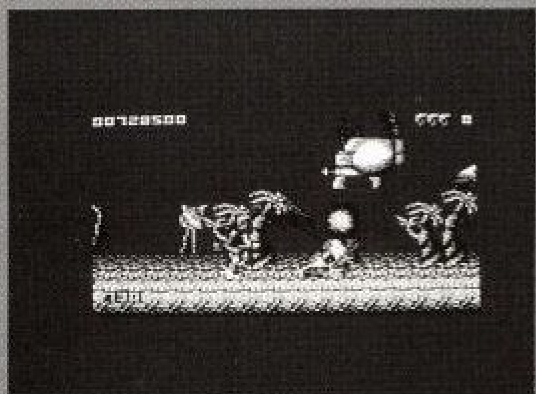
Spectravideo sales manager Richard Sekula said of the new gadget: "If you look at computers, with all the wire that is coming out of the back, the resulting entanglement is enough to make Birmingham's spaghetti junction look simple. With the new infrared joystick, you can play your favourite games without having yards of wire running across the room which can get pulled out and look untidy."

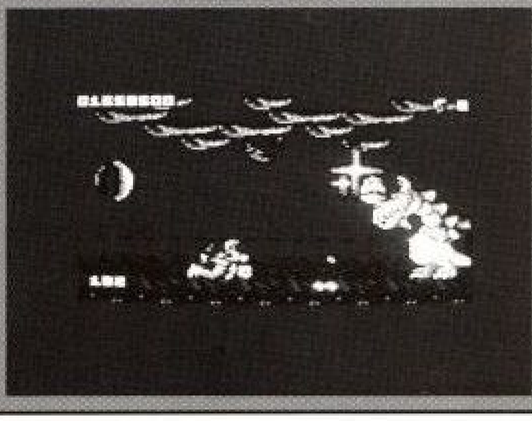
The Spectravideo IR Joystick will cost £39.95 and should be in the shops soon.



MARINE ACTION

Have you ever wanted to don that spectacular outfit and join the rough, tough world of the marines? Well, here's your chance. Astro Marine Corps, the new release from Dinamic, sees you patrolling the galaxy in a desperate bid to destroy a horde of galactic criminals known as the Deathbringers, who have set out to take over the galaxy. AMC features nine different types of weapons for you to deal out death with and over 25 assorted characters with a multi-level arcade type gameplay. At £14.99 for the disc version and £9.99 for the cassette, AMC is due for release round about now, so go and out and get blasting.









It's time to hang tough folks. In this month's fabulous Cycles competition, we are giving away an incredible cool black leather bikers jacket, courtesy of Accolade. If that were not enough, there are also five super Cycles T-shirts to be won by the lucky runners up. If you think you're tough enough to take away one of these prizes, all you have to do is send in your best drawing of the fastest supercool, supercharged motorbike you can think of. Yes, you can make your designs as wacky as possible, we want to see them. Don't forget to put your address and jacket size on the entry or we won't know what size you want.

The editor's decision is final.

Send your entries to:

Supercharged,
ACU
Avralite Publications,
Panini House,
116-120 Goswell Road EC1.

25% or more off all non-budget software RRP

1st Choice for fast friendly service

EDUCATION

	Tape	Disc
Answer Back Quiz (6-11)	7.45	10.45
Fact Files for above		
Arithmetic (6-11)	3.70	6.70
English Words (12+)	3.70	6.70
Gen. Know. (12+)	3.70	6.70
Gen. Science (14+)	3.70	6.70
Nat. History (10+)	3.70	6.70
Spelling (6-11)	3.70	6.70
World Geog. (11+)	3.70	6.70
Better Maths (12-16)	8.20	12.70
Better Spelling (9-14)	8.20	12.70
Chemistry GCSE	10.95	14.95
French Mistress (A+B)	12.70	14.95
Fun School (2-5)	4.45	6.70
Fun School (5-8)	4.45	6.70
Fun School (8-12)	4.45	6.70
Fun School 2 (Under 6)	7.45	9.70
Fun School 2 (6-8)	7.45	9.70
Fun School 2 (Over 8)	7.45	9.70
Geog. Map Quiz (9+)	8.20	12.70
German Master (A+B)	12.70	14.95
Happy Letters (3-6)	7.45	10.95
Happy Numbers (3-5)	7.45	10.95
Happy Writing (3-6)	7.45	10.95
Magic Maths (4-8)	8.20	12.70
Map Rally (7-13)	7.45	10.95
Maths Mania (8-12)	8.20	12.70
Micro English	17.95	17.95
Micro Maths	17.95	17.95
Physics GCSE	10.95	14.95
Primary Maths	17.95	17.95
The Three Bears	-	12.70
Timeman One (4-9)	7.45	10.95
Timeman Two (4-10)	7.45	10.95
Word Hang (5+)	7.45	10.95
World Wise (7+)	7.45	10.95

BUSINESS

	Tape	Disc
Mini Office (Budget)	2.99	4.99
Mini Office 2	10.95	14.95
Promerge	-	18.70
Prospell	-	18.70
Protext	14.95	19.95
Sprites Alive (Req. 128k)	-	17.20
Sprites Alive + Compiler	-	22.45
Tasprint	10.95	10.95
Tassign	-	22.45
Tasspell	-	14.95
Tasword464	18.70	22.45
Tasword6128	-	22.45

LEISURE & SPORT

	Tape	Disc
Colossus Bridge	8.95	10.95
Colossus Chess 4	7.45	10.95
Cricket Master	6.70	-
E. Hughes Int. Soccer	7.45	10.95
F'tball Man. 2 & Exp Kit	7.45	10.95
F'tballer of the Year 2	-	10.95
Game Set & Match 2	9.70	13.45
Hot Rod	7.45	10.95
Jack Nicklaus Golf	7.45	12.70
Kick Off	7.45	10.95
Liverpool	7.45	10.95
Mind Stretchers (Cleudo Monopoly & Scrabble)	14.95	14.95
Passing Shot	7.45	10.95
Pictionary	10.45	14.95
Scruples	7.45	10.95
Sporting Triangles	7.45	10.95
Supreme Chal. Soccer	9.70	12.70
Treble Champions	7.45	10.45
Trivia	5.20	-
Triv. Pursuit Genus	10.95	14.95

ADVENTURE

	Tape	Disc
Castle Master	7.45	10.95
Bards Tale 1	2.99	6.99
Lancelot	10.95	14.95
Scapeghost	10.95	14.95
Time and Magik	-	10.95

ARCADE

	Tape	Disc
After the War	7.45	10.95
Batman The Movie	7.45	10.95
Beverly Hills Cop	7.45	10.95
Black Tiger	7.45	10.95
Bomber	10.95	14.95
Chase HQ	7.45	10.95
Chuck Yeagers AFT	6.70	10.95
Coin Op Hits	10.95	14.95
Crazy Cars 2	7.45	10.95
Cyberball	7.45	9.70
Dan Dare 3	7.45	10.95
Dark Century	7.45	10.95
Dr Doom's Revenge	7.45	10.95
Dynamite Dux	7.45	10.95
Exploding Wall	7.45	10.95
Fiendish Freddy	7.45	10.95
Ghouls & Ghosts	7.45	10.95
Hammerfist	7.45	10.95
Heavy Metal	7.45	-
Hunt For Red October	10.95	14.95
Impossamole	7.45	10.95
Joystick Thunder	8.70	13.45
Klax	7.45	10.95
Mega Mix	10.95	-
Myth	7.45	10.95
New Zealand Story	7.45	10.95
Ninja Spirit	7.45	10.95
Operation Thunderbolt	7.45	10.95
Operation Wolf	7.45	10.95
P-47 Thunderbolt	7.45	10.95
Pinball Magic	7.45	10.95
Pipe Mania	7.45	10.95
Rainbow Islands	7.45	10.95
Rick Dangerous	7.45	10.95
Robocop	7.45	10.95
Scramble Spirits	7.45	10.95
Sonic Boom	7.45	10.95
Space Harrier 2	7.45	10.95
Spherical	7.45	10.95
Star Wars Trilogy	9.70	14.95
Taito Coin Op. Hits	9.70	-
The Biz	10.95	-
Turbo Outrun	7.45	10.95
Untouchables	7.45	10.95
Wild Streets	7.45	10.95
Xenon	7.45	10.95
X-Out	7.45	10.95

BUDGET

	Tape	Disc
3D Pinball	2.99	
Alien Syndrome	2.99	
Arkanoid	2.99	
Bards Tale 1	2.99	6.99
Beyond The Ice Palace	2.99	
Blade Warrior	2.99	
Buggy Boy	2.99	
Captain Blood	2.99	
Count Duckula	2.99	
Crazy Cars	2.99	
Cybernoid	2.99	
Dizzy	2.99	
Fantasy World Dizzy	2.99	
Ghosts N Goblins	2.99	
Ikari Warriors	2.99	
Joe Blade 3	2.99	
Little Puff	2.99	
Micro Mouse	2.99	
Mini Office	2.99	4.99
Oli & Lisa 3	2.99	
Paper Boy	2.99	
Pegasus	2.99	6.99
Postman Pat 2	2.99	
Pub Trivia	2.99	
Rockstar ate Hamster	2.99	
Space Harrier	2.99	
Spy Vs Spy 3	2.99	
Thomas Tank Engine	2.99	
Thriller Pack	2.99	
Treasure Island Dizzy	2.99	
Wizard Willy	2.99	
Wonderboy	2.99	
W. Class Leaderboard	2.99	
Yeti	2.99	
Art Master	1.99	
Bomb Jack	1.99	
Bomb Jack 2	1.99	
Bronx St. Cop (L. Gun)	1.99	
Classic Arcadia	1.99	
G. Gooch Match Cricket	1.99	
Joe Blade 2	1.99	
Jungle Warriors (L. gun)	1.99	
Postman Pat	1.99	
Steve Davis Snooker	1.99	

Tape £2.99 Disc £4.99

Bend the rules, get the best out of your games with ready to use cheats.

CHOICE CHEATS 1

Cheats for 12 games including:Operation Wolf, Cybernoid, Joe Blade 2, and Shanghi Karate.

CHOICE CHEATS 2

Cheats for 12 games including: Tr. Island Dizzy, Batman Cap. Crus. Dragon Ninja and Arkanoid.

CHOICE CHEATS 3

Cheats for 12 games including:Thunder Blade, After Burner, Robocop, Skweek, Thunderbirds, Yabba Dabba Doo and Yogi Bear.

JOYSTICKS

Quickshot 2 Turbo	£9.95
Megablaster	£6.45
Delta 2000	£8.95
Star probe	£13.95
Quickjoy 2	£6.95
Q'joy 3 S. Charger	£11.50
Q'joy 5 Superboard	£17.50
Q'joy 6 Jet Fighter	£13.50

BUDGET BARGAIN

Save over £1

3 @ £1.99 **only** or 2 @ £2.99 **£4.95**

RIBBON REFRESH

Printer Ribbon Restorer

Only £7.95

Seal 'n Type

Keyboard protector (464 or 6128) Only £8.95

MAGNUM LIGHT PHASER

Complete with 6 games Only £29.95

BLANK DISCS

Maxell CF2 3" discs

£21.95 for 10

£11.25 for 5

£2.35 each

Prices include VAT and P & P subject to availability. UK only

To order, state name, address, computer, tape or disc and send it with a cheque or P O to

1st Choice Software Ltd., Dept AU6, 4 Paul Row, Temple Lane, Littleborough, Lancs. OL15 9QG

PHONE 0706 72728

1ST CHOICE SOFTWARE LTD

ROMANTIC ROBOT present

multiface two

RESET · STOP

If you wish to **FREEZE** a program any time, **BACK it UP** to **disk/tape** fully automatically at a touch of a button, then the **MULTIFACE TWO** is the **ONE** and **ONLY** answer! It is extremely simple to use, idiot-proof, menu driven with on-screen instructions, 100% reliable - **PURE MAGIC**... Just **RUN** any program, **STOP** it by the **FREEZE BUTTON**, **SAVE** *PROGRAM* or *SCREEN* to disk/tape or use built-in **MULTI-TOOLKIT** to study, **POKE** infinite lives, ammo, etc. When you **RETURN** to the program or **RELOAD** it next time, it will automatically **CONTINUE** from where frozen. You DON'T need to do ANYTHING - just push the button, name the program, insert disk/tape and press a few keys. **MULTIFACE** works on **ANY CPC** needs **NOTHING extra**, but in order to prevent piracy it must be attached to your CPC to **RUN** the programs it **SAVED** - see the box below!

NOW ON **SPECIAL MAIL ORDER SALE** at just £37.95!

£10 OFF the MULTIFACE 2

Do you need to know what happens ANY TIME INSIDE a RUNNING CPC program?

Get INSIDE INFORMATION!

Install **INSIDER** into *MULTIFACE 2*, **RUN** a program, let *Multiface* **FREEZE** it and the **INSIDER** tell you everything: it fully *disassembles*, *finds* text or code, *shows/alters* RAM and **Z80** registers, *dumps* to printer, etc. All this and more for ~~£14.95~~. Now on **SALE** for just **£9.95**! *Invaluable tool for machine code users!*

A unique de-bugging/development aid.

The INSIDER has no use for piracy - see the box below!

ROMANTIC ROBOT THE INSIDER

£5 OFF

THE RODOS SYSTEM

Would you like to be able to attach additional disk drives – 40/80 track, single/double sided, 5.25 or 3.5 or 3 inch – and store up to 800K per disk? All controlled by a powerful DOS? Have RANDOM ACCESS to your files? Get a PRINTER BUFFER and SILICON DISK and a ROM manager and over 50 new bar commands! All this on a single ROM!

Now also available: RODOS EXTRA on disk for only £9.95. Any RODOS owner will find RODOS EXTRA indispensable: it offers nearly 200K of valuable information how to get the most out of RODOS with examples of RODOS applications ranging from simple to complex such as a DISK DOCTOR or IBM MSDOS DISK READER. The indispensable EXTRA!

£10 OFF

You MUST NOT use any of the above products to copy, reproduce or infringe in any way any copyright material without the clear permission of the copyright owner. We do neither condone nor authorise the use of our products for the reproduction of copyright material - to do so is ILLEGAL!

KRAZY! £10 OFF the MULTIFACE and RODOS! £5 OFF the INSIDER!

I order a **Multiface** ☐ ~~£47.95~~ **£37.95** **Rodos** ☐ ~~£29.95~~ **£19.95** Rodos **Xtra** ☐ ~~£9.95~~ **£6.95** **Insider** ☐ ~~£14.95~~ **£9.95** + **p&p**!: UK **£1**, Europe **£2**, Overseas **£3**.

I enclose a **cheque/PO/cash** for £............. or debit my **Access/Visa** No. [ ] Card Exp.............

Name/address...

The above reduced prices apply strictly only to mail orders received by 31/5/1990.

ROMANTIC ROBOT UK LTD 54 Deanscroft Ave, London NW9 8EN ☎ 24 hrs VISA 01-200 8870 acu

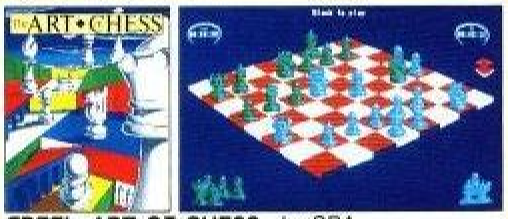
FREE! TENSTAR PACK WORTH OVER £229!



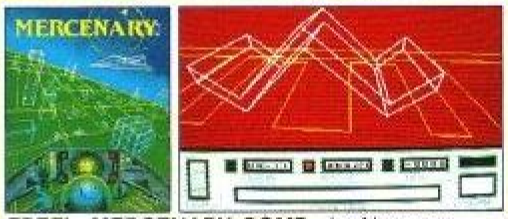
FREE! - **AMEGAS** - by Players



FREE! - **INSANITY FIGHT** - by Microdeal



FREE! - **ART OF CHESS** - by SPA



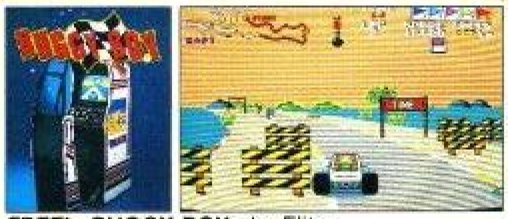
FREE! - **MERCENARY COMP** - by Novagen



FREE! - **BARBARIAN, ULT WARRIOR** - by Palace



FREE! - **TERRORPODS** - by Psygnosis



FREE! - **BUGGY BOY** - by Elite



FREE! - **THUNDERCATS** - by Elite

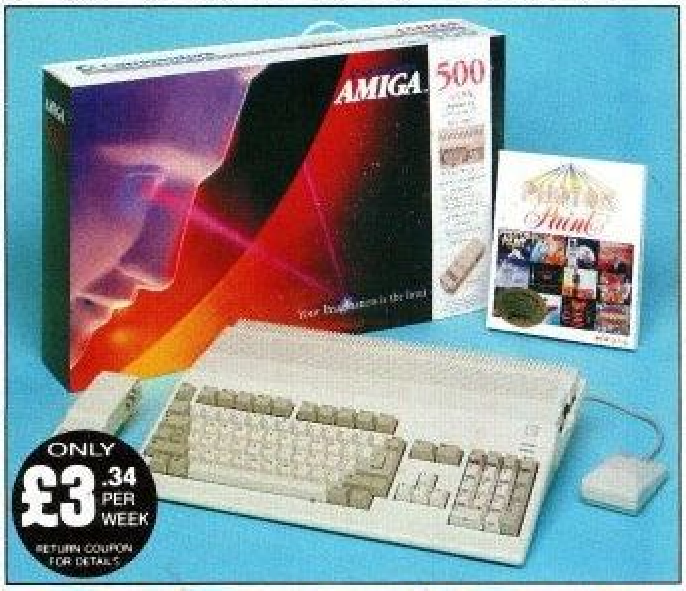


FREE! - **IKARI WARRIORS** - by Elite



FREE! - **WIZBALL** - by Ocean

Commodore AMIGA



£346.95 +VAT= £399

INCLUDES FREE UK DELIVERY

The Amiga 500 is one of a new breed of technologically advanced computers, which are now emerging as the new standard for home computing, based around the new Motorola 68000 chip. The A500 has 512K RAM and a 1Mbyte double sided disk drive built-in. It can be connected directly to a wide range of monitors, or to a domestic TV set through a TV modulator. Designed with the user in mind, the A500 features a user friendly WIMP environment and comes supplied with a free mouse. And, when you buy your Amiga from Silica Shop, the UK's No1 Amiga specialists, you will experience an after sales service that is second to none, including a technical support helpline and free newsletters and price lists. Return the coupon below for our current information pack, which will give details of the Silica service and the very latest Silica Amiga offers. E&OE

WHY SILICA SHOP?

Before you decide when to buy your new Commodore Amiga computer, we suggest you consider very carefully WHERE you buy it. There are MANY companies who can offer you a computer, a few peripherals and the top ten selling titles. There are FEWER companies who can offer a wide range of products for your computer as well as expert advice and help when you need it. There is ONLY ONE company who can provide the largest range of Amiga related products in the UK, a full time Amiga specialist technical helpline and in-depth after sales support, including free newsletters and brochures delivered to your door for as long as you require after you purchase your computer. That one company is Silica Shop. We have been established in the home computer field for ten years and can now claim to meet our customers' requirements with an accuracy and understanding which is second to none. Here are just some of the things we can offer you.

THE FULL STOCK RANGE: The largest range of Amiga related peripherals, accessories, books and software in the UK.

AFTER SALES SUPPORT: The staff at Silica Shop are dedicated to help you to get the best from your Amiga.

FREE NEWSLETTERS: Mailed direct to your home as soon as we print them, featuring offers and latest releases.

FREE OVERNIGHT DELIVERY: On all hardware orders shipped to Silica Shop customers within the UK mainland.

PRICE MATCH PROMISE: We will normally match our competitors offers on a 'same product same price' basis.

FREE TECHNICAL HELPLINE: Full time team of Amiga technical experts to help you with your technical queries.

But don't just take our word for it. Complete and return the coupon below for our latest Amiga literature and begin to experience the Silica Shop specialist Amiga service.

PHOTON PAINT PACK

A500 Computer	£399.99
TV Modulator	£24.99
Photon Paint	£69.95
TenStar Pack	£229.50
TOTAL RRP:	£724.43
LESS DISCOUNT:	£325.43
PACK PRICE INC VAT:	£399

1084S MONITOR PACK

A500 Computer	£399.99
1084S Colour Monitor	£299.99
Photon Paint	£69.95
TenStar Pack	£229.50
TOTAL RRP:	£999.43
LESS DISCOUNT:	£350.43
PACK PRICE INC VAT:	£649

FREE FROM SILICA

When you buy the Amiga 500 from Silica Shop, you will not only get a high power, value for money computer, we will also give you some spectacular free gifts. First of all, we are now including a TV modulator with every A500 stand alone keyboard, so you can plug your Amiga straight into your TV at home (the modulator is not included with the A500+A1084S pack as it is not required for use with monitors). Secondly, we have added a free copy of Photon Paint, an advanced graphics package with an RRP of £69.95. Last (and by no means least!), so that you can be up and running straight away, we are giving away the sensational TENSTAR GAMES PACK with every A500 purchased at Silica Shop. This pack features ten top Amiga titles which have a combined RRP of nearly £230! Return the coupon for details.

FREE TENSTAR PACK

When you buy your Amiga 500 from Silica Shop, we want to make sure you get the best deal possible. That is why we are giving away the TENSTAR GAMES PACK worth nearly £230, absolutely FREE with every A500 purchased from us. The TenStar Games Pack includes ten titles for the A500, each individually packaged in its own casing with instructions.

Amegas	£14.95
Art Of Chess	£24.95
Barbarian, Ult Warrior	£19.95
Buggy Boy	£24.95
Ikari Warriors	£24.95
Insanity Fight	£24.95
Mercenary Comp	£19.95
Terrorpods	£24.95
Thundercats	£24.95
Wizball	£24.95
	£229.50

TOTAL RRP: £229.50 INC VAT

DO YOU OWN AN AMIGA?

If you already own an Amiga computer and would like to be registered on our mailing list as an Amiga user, let us know. We will be pleased to send you copies of our price lists and newsletters FREE OF CHARGE as they become available. Complete the coupon and return it to our Sidcup branch and begin experiencing a specialist Amiga service that is second to none.

SILICA SHOP:

SIDCUP (& Mail Order) **01-309 1111**
1-4 The Mews, Hatherley Road, Sidcup, Kent, DA14 4DX
OPEN: *MON-SAT 9am - 5.30pm* ***LATE NIGHT:*** *FRIDAY 9am - 7pm*

LONDON **01-580 4000**
52 Tottenham Court Road, London, W1P OBA
OPEN: *MON-SAT 9.30am - 6.00pm* ***LATE NIGHT:*** *NONE*

LONDON **01-629 1234 ext 3914**
Selfridges (1st floor), Oxford Street, London, W1A 1AB
OPEN: *MON-SAT 9am - 6.00pm* ***LATE NIGHT:*** *THURSDAY 9am - 8pm*

To: Silica Shop Ltd, Dept AMSACU 06/90, 1-4 The Mews, Hatherley Road, Sidcup, Kent DA1 4DX

PLEASE SEND ME FREE LITERATURE ON THE AMIGA

Mr/Mrs/Ms: .... Initials: .... Surname: ....

Address: ....

....

....

.... Postcode: ....

Do you already own a computer
If so, which one do you own? ....



COMBAT ZONE

All the latest news from the arcade scene and Philosophy for Beginners thrown in for good measure – it could only happen in ACU.

You know what I say. "If at first you don't succeed, give up". Along with that immortal gem, "If a job's worth doing, it's worth doing badly", I present these to you as admiral axioms with which to arm yourself as you forge your way through the kaleidoscope of experience known as life. Just as well that Sega doesn't agree with me, though.

Well over a year ago, it presented to the coin-op trade a prototype, four player game known as Last Survivor. Now, this looked very interesting indeed.

Each player had a separate upright

Last survivor



monitor, from which you were given an "out of the eyes" view of various mazes. You play one of eight characters stuck in this maze, together with assorted, somewhat unfriendly monsters. Each of the characters – up to four of which can be played by a human being remember – starts in possession of a

golden key.

I say stuck in – because that's what you are, because it takes a total of four keys to unlock the exit to the maze. I also say stuck in, because that is what everyone gets, for the only way to collect keys is to shoot people, then walk over the body.

Once you are in possession of four, you race to the exit and first one to leave the maze alive wins the round.

So, a year ago the game looked good (using Sega's superb in-house sprite expansion/reduction technology), it even sounded good, and the game idea was excellent. Why then, did it play like a dog?

Whatever the reason (and my money goes on the moronic way that the non-player characters and monsters were acting), Sega must have listened to what everyone was saying and went back to the drawing board.

Now it's back in the showrooms – prior to entry into the arcades – and I'll tell you this, it's improved beyond belief.

The playability is just right, with computer controlled characters being just as vindictive and sneaky as many human controlled would be, and the pace of the game set perfectly. The look of the game is distinctively cartoon-like, technically sound and a whole lot of fun. Well worth the investment if you see it and a spontaneous round of applause for Sega for delaying release until Last Survivor was ready. Are you listening software houses?!?!?

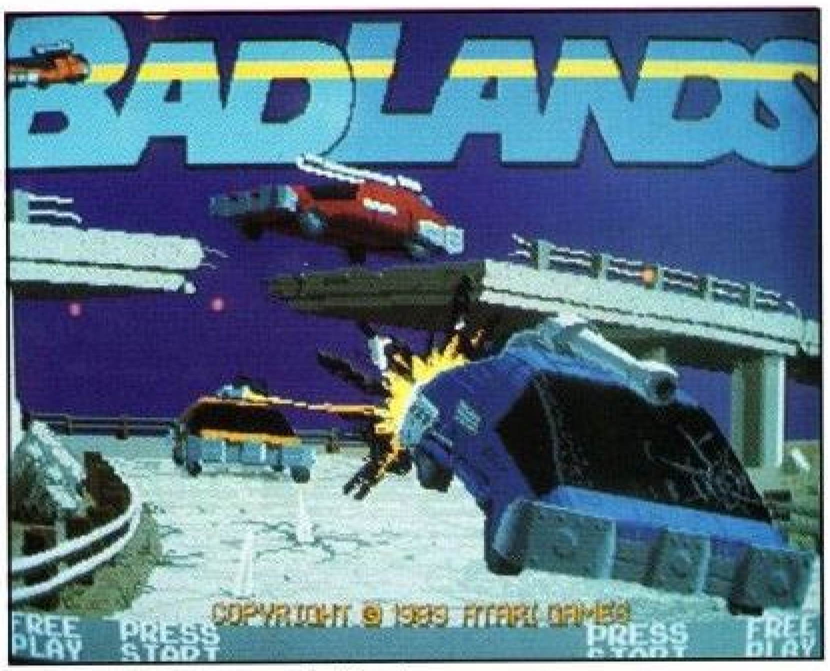
It's obviously been a busy month for Sega, as I was summoned to look at it's latest PCB a couple of days ago. Regular readers will know that I am a great fan of Tetris, originally programmed by Mirrorsoft here in the UK from an idea developed in Russia.

Now it's mushroomed into a world phenomena beyond belief, being bundled with the Nintendo Gameboy (one million sales in America alone), a mega-hit on coin-op, etc, etc. And just think – you can play it for just £2.99 on your CPC!

Well, the coin-op rights for the original were sold to Atari Games, who did a very creditable job indeed. And just about every other coin-op firm went potty to try to emulate that success with their own puzzle efforts.

Bloxeed





Badland



Almost to a man, these were utterly dismal, with the recent exceptions of Block Hole from Konami and Klax from, again, Atari Games.

Sega, to its credit, didn't rush out any half baked ideas – much to everyone's surprise. Now we all know why. They went to the Russkies and got them to program a sequel. The sequel is Bloxeed.

The basic idea behind Tetris remains – simple shapes fall down from the top of the screen into a U-Shaped playfield. You can move these shapes left/right within the playfield and rotate them, with the object being to make full lines across the width of the U-Shape – which then disappear.

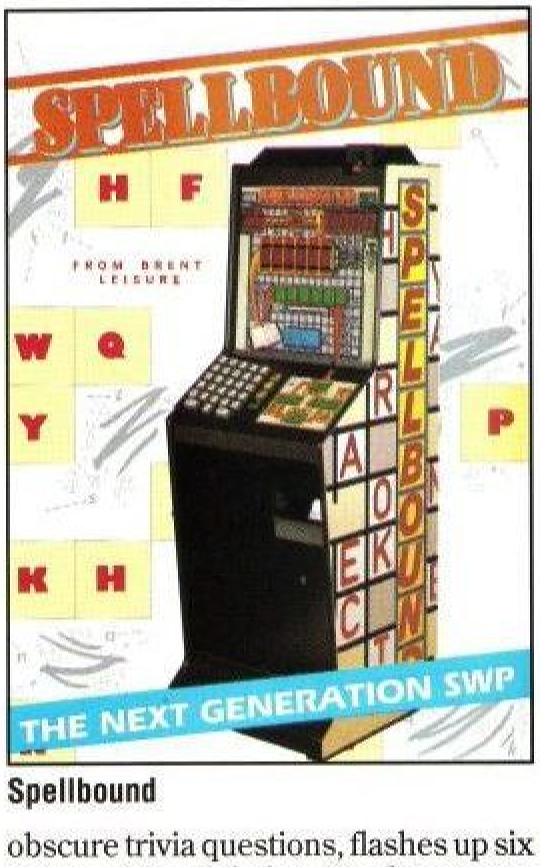
The difference in Bloxeed is that, from time to time, shapes appear that have letters built into the shape. Make a line with one of these letter blocks in and – hey presto – you get some kind of power-up appearing at the top of the screen. There are four of these which can either destroy blocks or create them, to your whim.

That change might not sound too radical – and you'd be right – but added to this is that the game is now much, much faster than its predecessor ever was on coin-op or home computer. Tetris the Coin-op was an addictive intellectual diversion. Bloxeed is a puzzle/arcade thrash that will produce just as much adrenalin as any classic shoot-em up. Don't worry about the bad graphics – just get down there and play the game, boys!

Talking about variations on a theme, Atari Games has just released a something called Badlands. No guesses for what it looks like, eh? Come back Super Sprint, all is forgiven.

Basically, it's Championship Super Sprint, with new graphics, courses and the ability to blast your opponents. Me, I don't go for it, looks nice on the telly, 'though.

Finally, get down to those arcades with the dictionaries – there's now a Skill with Prizes (SWP if you're in the trade) which, instead of flashing up obscure trivia questions, flashes up six letters of the alphabet. You have to try and make words of 4, 5, or for mega points, all six of these letters. Type them in within a time limit and – do it often enough – you get some money.



Spellbound

Called Spellbound, at least it gives you a solid gold excuse to rush into the arcades – just for a bit of extra English homework, you understand...see you next month!

ALPHASPORT

BY ANDREW DAGNELL

"Daggers" Dagnell is at it again with a handy little utility designed to sort out a list of words into alphabetical order. Budding dictionary enthusiasts should follow the prompts to enter their chosen words and watch for rapid results.

```
10 'Alphabetical sorting:Andrew Dagnall:24/2/1990:Age 12:
20 INK 0,0:INK 1,26:INK 2,2:INK 3,6:PEN 1:PAPER 0:BORDER 26:
CLS:'An alternative machine code version is provided for
line 60:look at it all you budding      machine-codists. It
uses @ which is the AMSTRAD version of VARPTR. You can
change n in 40
30 PRINT"ALPHABETICAL SORT                          This progra
m is an alphabetical sorter. Before I can sort your words ou
t, you  must tell me what they are. You can typein phrases
too, but NO commas please.   Okay!":PRINT
40 n=10:PRINT"INPUT YOUR";n;"WORDS":DIM k$(n):FOR i=1 TO n:I
NPUT k$(i):NEXT:y=1:WHILE y<n:y=2*y:WEND
50 y=INT((y-1)/2):it=n-y:IF y=0 THEN GOTO 100 ELSE PRINT"SOR
TING CODE #";y;"+";it;"=";n
60 FOR i=1 TO it:j=i
70 z=j+y:IF UPPER$(k$(z))<=UPPER$(k$(j)) THEN GOSUB 90:IF j>
0 THEN 70
80 NEXT i:GOTO 50
90 x$=k$(z):k$(z)=k$(j):k$(j)=x$:j=j-y:RETURN:'FOR l=0 TO 2:
y1=PEEK(@k$(z)+1):y2=PEEK(@k$(j)+1):POKE (@k$(z)+1),y2:POKE
(@k$(j)+1),y1:NEXT:j=j-y:RETURN
100 PRINT"SORTING COMPLETED":FOR loop=1 TO n:PRINT k$(loop):
NEXT:WHILE INKEY$<>"":WEND:WHILE INKEY$="":WEND
```

SPIRAL 10

BY J. BRADLEY

Graphics demos come and go, but there is more than enough action in this little beauty to keep you interested. A clever little loop mode will send you cross-eyed as the series of shapes do their duty on the screen.

```
10 'CPC 6128 COLOUR DEMO by J BADLEY [F1]
20 MODE 0:DIM i(27):h=315:v=200:DEG [2A]
30 FOR i=0 TO 26:i(i)=i:IF i<16 THEN INK i,i [A4]
40 NEXT:BORDER 0:PAPER 0:i=1 [ED]
50 FOR s=3 TO 10:t=s*1.5:d=180/s:q=(180-360/s)/2:r=212:WHILE r>20:i=i MOD 15+1 [
36]
60 FOR c=0 TO 365 STEP 360/s:a=c+d:x=SIN(a)*r+h:y=(COS(a)*r*0.94)+v [92]
70 IF c=0 THEN MOVE x,y,i ELSE DRAW x,y,i [AE]
80 NEXT:MOVE h,v:FILL i:d=d+t:r=r*SIN(q)/SIN(180-q-t):WEND [66]
90 FOR f=1 TO 26:i(27)=i(1):FOR e=1 TO 26:i(e)=i(e+1):IF e<16 THEN INK e,i(e) [7
9]
100 IF INKEY$<>"" THEN END ELSE NEXT e,f:CLG:NEXT s:GOTO 50 [78]
```

MASMIND

BY GEORGE HO YOW

I've started so I'll finish. Yes, I know it's a bad pun, but never mind. This mini-computerised version of Mastermind will really have you up against the ropes as you struggle to guess a four digit sequence in just seven attempts. If you are really smart, you can make it more difficult by increasing the "wid' value. Good luck.

```
10 MODE 1 ' a number-guessing game by George Ho-Yow 18.1.90.  The width and limi
t to the no. of guesses can be easily adjusted, just change the value of 'wid'.
 [E4]
20 wid=4:lvl=wid+3:CLS:PRINT"This is a number guessing game!":PRINT"Enter a ";wi
d;"-digit number.":PRINT:PRINT"Hit any key to start....Good Luck!" : 'the game c
an be made easier by setting 'lvl+3' to a higher value, and harder by increasing
 'wid' [3C]
30 a$=INKEY$:IF a$="" THEN 30 [35]
40 t=0:RANDOMIZE TIME:FOR xx=0 TO wid-1:c(xx)=INT(RND*10):NEXT [B8]
50 PRINT:PRINT:t=t+1:WHILE t<lvl+1:PRINT USING "##";t;:PRINT": ";:INPUT "",a$::P
RINT SPACE$(wid+6);:PRINT CHR$(11);:PRINT "> ";:IF LEN(a$)<wid THEN PRINT wid;"-
DIGIT NO. REQD!":GOTO 50 [2C]
60 FOR p=0 TO wid-1:d$(p)=MID$(a$,p+1,1): e(p)=ASC(d$(p))-48:NEXT [BC]
70 bc=0:FOR pp=0 TO wid-1: x(pp)=c(pp):IF x(pp)=e(pp) THEN x(pp)=66:e(pp)=66:bc=
bc+1  [FC]
80 NEXT:b=0:c=0:WHILE c<wid:WHILE b<wid:IF e(c) =66 THEN c=c+1:b=0 ELSE IF x(b)=
e(c) THEN e(c)=87:x(b)=88:c=c+1:b=0 ELSE b=b+1:WEND:e(c)=45:c=c+1:b=0 [F5]
90 WEND:IF bc=wid THEN PRINT "You win!!":PRINT:PRINT"Hit any key for another gam
e...":GOTO 30 ELSE FOR q=0 TO wid-1:PRINT CHR$(e(q));:NEXT:GOTO 50:WEND:PRINT"Be
tter Luck next time!!!" [EB]
100 PRINT:PRINT "The number was... ";:FOR r=0 TO wid-1:PRINT USING "#";c(r);:NEX
T:PRINT:PRINT:PRINT"Hit any key to have another go!":GOTO 30 [88]
```

SHOOT

BY A. DAVIDSON

You will have to have reflexes as sharp as a scalpel to succeed at this game of pot-shot. Using the joystick to move the arrow around the screen you have to chase the small targets as they appear and shoot them before they go again. It is certainly a challenge.

```
10 MODE 1:SYMBOL 240,65,34,28,20,28,34,65,0:SYMBOL 241,252,172,212,172,212,172,2
12,252:SYMBOL 242,0,28,62,127,119,127,62,28:TAG:x=320:y=150:MOVE x,y,1,1:PRINT C
HR$(240);:BORDER 0:INK 0,0:INK 1,24:INK 2,9:INK 3,26:l=0:k=0:sc=0:sh=20     [7D]
20 SYMBOL 243,252,212,172,212,172,212,172,252 [CB]
30 IF INKEY(8)=0 AND x>16 THEN TAG:MOVE x,y,1,1:PRINT CHR$(240);:x=x-8:TAG:MOVE
x,y,1,1:PRINT CHR$(240);:ELSE IF INKEY(1)=0 AND x<607 THEN TAG:MOVE x,y,1,1:PRIN
T CHR$(240);:x=x+8:TAG:MOVE x,y,1,1:PRINT CHR$(240); [91]
40 IF INKEY(2)=0 AND y>30 THEN TAG:MOVE x,y,1,1:PRINT CHR$(240);:y=y-8:TAG:MOVE
x,y,1,1:PRINT CHR$(240);      [11]
50 IF INKEY(0)=0 AND y<382 THEN TAG:MOVE x,y,1,1:PRINT CHR$(240);:y=y+8:TAG:MOVE
 x,y,1,1:PRINT CHR$(240);      [8D]
60 IF INKEY(47)=0 AND k=1 AND (TEST(x+8,y-6)=2 OR TEST(x+2,y-6)=2) THEN sc=sc+1:
sh=sh-1:CLS:MOVE x,y,3,1:PRINT CHR$(242);:FOR p=0 TO 9:NEXT:MOVE x,y,3,1:PRINT C
HR$(243);:CLS:MOVE x,y,1,1:PRINT CHR$(240);:k=0 ELSE IF INKEY(47)=0 THEN sh=sh-1
 [74]
70 IF l=50 THEN c=CINT(RND*591+16):v=CINT(RND*350+32):MOVE c,v,2,1:PRINT CHR$(24
1);:k=1:l=0 ELSE l=l+1     [92]
80 IF l=49 AND k=1 THEN MOVE c,v,2,1:PRINT CHR$(241);         [3E]
90 IF sh=0 THEN MODE 1:FOR t=0 TO 1000:CLEAR INPUT:NEXT:LOCATE 4,15:PRINT "YOU S
CORED "sc:LOCATE 4,20:PRINT "PRESS ANY KEY FOR ANOTHER GAME":CALL &BB18:GOTO 10
[29]
100 GOTO 30 [90]
```

BANNER

BY J. KENWORTHY

Here's a neat 10-liner for all you flag wavers out there. You will need an Epson compatible printer for this, as stated in line 20, but once set up, the program will allow you to print out the banner of your choice. By removing the REM at the start of line 40 (') you can compress the print for a different effect.

```
10 ' the letter in quotes after chr$(27)      in line 30 is a
n L, and the one in       line 40 is a ONE : de-rem line 40
     for compressed print.
20 MODE 1:PRINT"THIS PROGRAM REQUIRES THE USE OF AN      EPSO
N COMPATIBLE PRINTER, AND WILL PRINTGIANT BANNER MESSAGES.":
LOCATE 15,20:PRINT"PRESS SHIFT"
30 WHILE INKEY(21)<>32:WEND:SYMBOL AFTER 0:PRINT#8,CHR$(27);
"l";CHR$(20);:MODE 1:PRINT"type your text, then press enter"
:PRINT:PRINT:LINE INPUT"",D$
40 ' ?#8,chr$(27);"1";chr$(20);
50 BL$=SPACE$(5):PL$=STRING$(5,64):LF$=CHR$(13)+CHR$(10)
60 FOR t=1 TO LEN(d$):a$=MID$(d$,t,1):r=HIMEM+1+(ASC(a$)*8)

70 FOR y=0 TO 7:x$(y)=BIN$(PEEK(r+y),8):NEXT y:FOR a=0 TO 7:
FOR b=8 TO 1 STEP -1
80 IF MID$(x$(b-1),a+1,1)="0" THEN pr$=pr$+BL$ ELSE pr$=pr$+
PL$
90 NEXT b:PRINT#8,pr$;LF$;pr$:pr$="":NEXT a:NEXT t
100 LOCATE 1,10:PRINT"RUN COMPLETED...":LOCATE 15,20:PRINT"P
RESS SHIFT":RUN 30
```

TUNNEL

BY ANDREW DAGNELL

Deep down in the bowels of the earth lies a dark subterranean tunnel from which, once entered, no-one has ever returned. Take a look at this demo and you can well understand why. The rapid series of colour changes as you look down to oblivion are enough to drive you crazy.

```
1 MODE 0
10 FOR a=0 TO 360:RAD:ORIGIN 320,200:MOVE 0,0:FOR loop=1 TO
15:DRAW loop*20*COS(a),loop*20*SIN(a),loop
20 NEXT:IF a MOD 10=0 THEN GOSUB 30
21 NEXT:WHILE -1:GOSUB 30:WEND
30 INK 0,0:FOR loop=0 TO 26:FOR loop2=1 TO 15:INK loop2,(loo
p2+loop) MOD 27:NEXT:NEXT
40 INK 0,0:FOR loop=26 TO 0 STEP -1:FOR loop2=1 TO 15:INK lo
op2,(loop2+loop) MOD 27:NEXT:NEXT:RETURN
```

SOFT OPTIONS

SOFT OPTIONS
6 HOPE STREET
HANLEY
STOKE ON TRENT
TEL: 0782 204269

SALE SALE SALE SALE SALE SALE

★★★★★★★★

AMSTRAD SUMMER SPECIALS

Chase HQ **£5.99**

Dynamite Dux **£3.99**

Fighting Soccer **£3.99**

Dragon Ninja **£4.99**

Altered Beast **£4.99**

Batman Movie **£5.99**

Cabal **£4.99**

Myth **£4.99**

Op Thunderbolt **£4.99**

★★★★★★★★

AMSTRAD SPECIALS

1943 .... **£2.99**
Night Raider **£2.99**
Street Fighter **£2.99**
Bionic Commando ... **£2.99**
By Fair Menas or Foul **£2.99**
Afterburner **£2.99**
Dominator **£2.99**
Bobs Full House **£2.99**
Every Sceond Counts **£2.99**
Endurance **£2.99**
Grange Hill **£2.99**
Galaxy Force **£2.99**
Gunsmoke **£2.99**
Real Ghostbusters **£2.99**
Evening Star **£2.99**
Highway Encounter **£1.99**
Fun School 2 6 to 8 .... **£4.99**
Matchday **£2.99**
Miami Vice **£2.99**
Minder **£2.99**
Leaderboard **£2.99**
Lords of Midnight ... **£2.99**
K + ... **£2.99**
KM **£2.99**
Karnov **£2.99**
Monopoly **£4.99**

AMSTRAD SUMMER SPECIALS

POWERDRIFT **£3.99**

RENEGADE 3 **£3.99**

RED HEAT **£3.99**

RUN THE GAUNTLET **£3.99**

SUPER HANG ON **£2.99**

XENON **£3.99**

TUSKER **£4.99**

THE RUNNING MAN **£3.99**

PACLAND **£3.99**

AMSTRAD SPECIALS

Psycho Pigs UXB **£2.99**
Platoon **£2.99**
Rex **£2.99**
Red Arrows **£2.99**
Rally Cross Challenge **£2.99**
Road Blasters **£2.99**
Predator **£2.99**
Nebulus **£2.99**
North Star **£2.99**
Netherworld **£2.99**
Nemesis Warlock **£2.99**
Roy of the Rovers ... **£2.99**
Rainbow Islands **£6.99**
Super Sprint **£1.99**
Scooby Doo **£2.99**
Saint & Greavsie **£2.99**
Rock Star Ate Hampster **£2.99**
Top Gun **£2.99**
Star Wars **£2.99**
Wonderboy **£2.99**
Thunderbirds **£3.99**
Thunderblade **£3.99**
X out **£6.99**
Tau Ceti **£2.99**
Tracksuit Manager **£4.99**
Tubaruba **£2.99**

AMSTRAD SPECIALS

Alien 8 .... **£2.99**
After The War **£6.99**
Devils Crown **£1.99**
Gladiator **£1.99**
Dynamite Dan **£1.99**
GFL Football **£2.99**
Ghouls & Ghosts **£6.99**
Turbo Outrun **96.99**
Blood Brothers **£2.99**
Big Sleeze **£2.99**
Blade Runner **£2.99**
Biggles **£2.99**
Big Trouble L. China **£2.99**
Crystal Castles **£2.99**
The Fury **£2.99**
Firezone **£2.99**
Cybernoid **£2.99**
Beyond Ice Palace ... **£2.99**
Ingrids Back **£4.99**
Moon Cresta **£2.99**
Impossible Mission **£2.99**
Knightmare **£2.99**
Ikari Warriors **£2.99**
Buggy Boy **£2.99**
Italian Supercar **£2.99**
Mindshadow **£2.99**

FLIGHT ACE
Air Traffic Controll, Strikeforce Harrier Advanced Tactical Fighter, Spitfire 40, Tomahawk.
ONLY £6.99

SUPREME CHALLAENGE SOCCER
Football Manager, World Champions, Peter Beardsly's International Football, Peter Shilton's Handball Maradona Soccer Supremo
ONLY £4.99

GAME SET AND MATCH 2
Track and Field, Ian Bothams Test Match, Basket Master, Super Hang On, Match Day II, Nick Faldo Open Match Day 2 Championship Sprint, Steve Daves Snooker
ONLY £7.99

10 GREAT GAMES 3
10th Frame, Firelord, Rana Rama, Rocco Fighter Pilot, Leaderboard City Slicker Impossiball, Dragontorc, Survivor
ONLY £5.99

SALE TIME AT SOFT OPTIONS - CAN YOU AFFORD TO MISS THESE.
ALL ORDERS SENT 1st CLASS POST, P&P UNDER £5 75p, OVER £5 P&P IS FREE

IN STOCK ITEMS DESPATCHED BY RETURN

SALE SALE SALE SALE SALE SALE

AMSTRAD COMPILATIONS

MEGA MIX
Dragon Ninja, Operation Wolf, Barbarian 2, Real Ghostbusters
NOW ONLY £8.99

100% DYNAMITE
Last ninja 2, Double Dragon, Afterburner, Wec Le Mans
NOW ONLY £8.99

HORROR COMPILATION
Dracula, Wolfman, Frankenstein
NOW ONLY £5.99

SPECIAL ACTION
Captain Blood, Driller, Vindicator, S.D.I., D Thompsons Olympic Chall.
REDUCED TO £5.99

KONAMI COLLECTION
Mikie, Jackal, Green Beret, Jailbreak, Ping Pong, Yie Ar Kung Fu 1 and 2, Nemesis, Shaolins Road, Hypersports
REDUCED TO £5.99

SUPREME CHALLENGE
Elite, Sentinel, Starglider, Tetris, Ace 2
REDUCED TO £5.99

AMSTRAD COMPILATIONS

MAG 7
Head Over Heels, Cobra, Short Circuit, Frankie, Arkanoid, Wizball, Great Escape, Yie Ar Kung Fu
NOW ONLY £4.99

WE ARE CHAMPS
Super Sprint, Renegade, Rampage, IK+, Barbarian
NOW ONLY £4.99

LEADERBOARD PAR 3
Leaderboard, World Class L'Board Tourn.
ALL 3 GAMES ONLY £7.99

COIN OP HITS
Outrun, Thunderblade, Road Blasters, Spy Hunter, Bionic Commando
ALL 5 GAMES ONLY £8.99

THE IN CROWD
Combat School, Gryzor, Barbarian, Crazy Cars, Predator, Platoon, Karnov, Target Renegade.
A CLASSIC AT ONLY £8.99

THE BIZ
Double Dragon, Op. Wolf, R-Type, Batman Caped Crusader
NOW ONLY £8.99

AMSTRAD DISCS

Chase HQ **£8.99**
Batman The Movie **8.99**
Special Action **8.99**
Operation Thunderbolt **£7.99**
Untouchables **£7.99**
Robocop **£8.99**
New Zealand Story **£7.99**
Operation Wolf **£7.99**
Gryzor **£6.99**
Run The Gauntlet ... **£6.99**
Victory Road **£5.99**
Vindicator **£5.99**
Beach Volley **£7.99**
Salamander **£5.99**
Red Heat **£5.99**
Rambo 3 .... **£5.99**
Dragon Ninja **£6.99**
Typhoon **£6.99**
Batman Caped Crusader ... **£6.99**
Cabal **£7.99**
R-Type **£5.99**
Scooby Doo **£3.99**
Afterburner **£4.99**
Cuthroats **£5.99**
Hollywood Hijinx **£5.99**

Please send me the following titles:			(ACU06)
Title	Cass or Disk		Amount
		P & P (if applicable)	
		Total Amount	

Name ....

Address ....

....

....

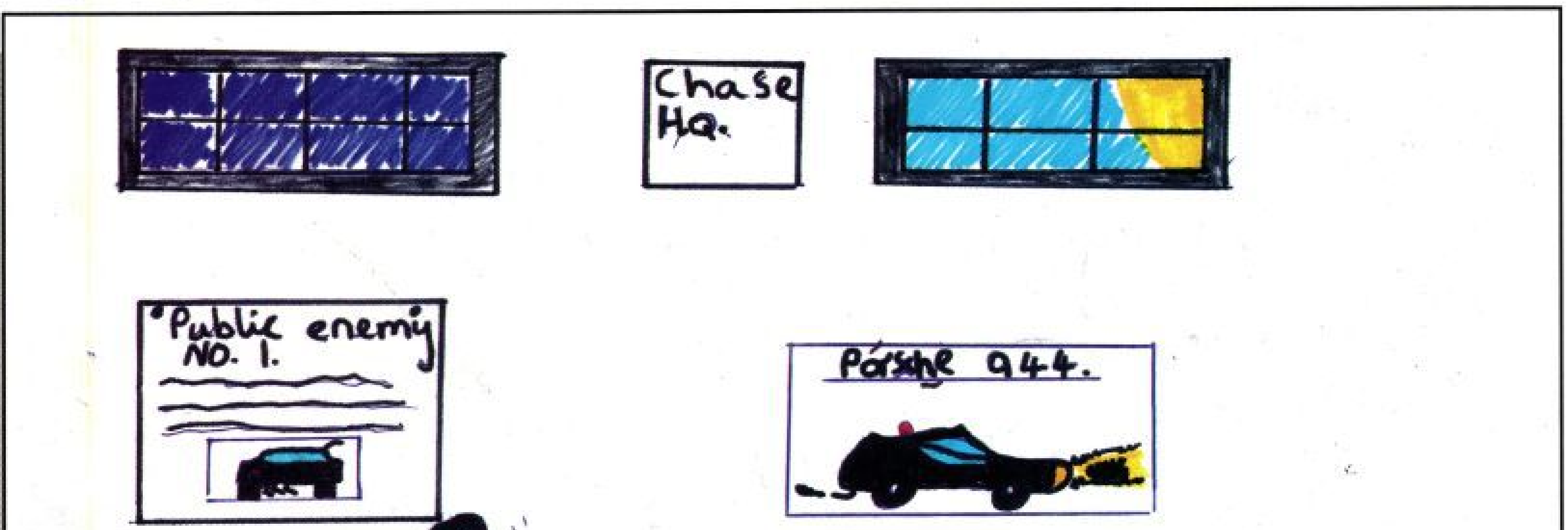
Telephone No ....


Virgin Games
DAN DARE III
The Escape
IBM PC
ATARI ST
AMIGA
CBM 64
SPECTRUM
AMSTRAD
IBM PC £24.99
ATARI ST £19.99
AMIGA £19.99
CBM 64 £9.99 (CASS)
£14.99 (DISC)
SPECTRUM £9.99 (CASS)
£14.99 (DISC)
AMSTRAD £9.99 (CASS)
£14.99 (DISC)



Ruth Redpath, Grimsby, Humberside: Over 14's Winner.

Winners Galore



Andrew Oliver, Salisbury, Wiltshire: Under 14's Winner.

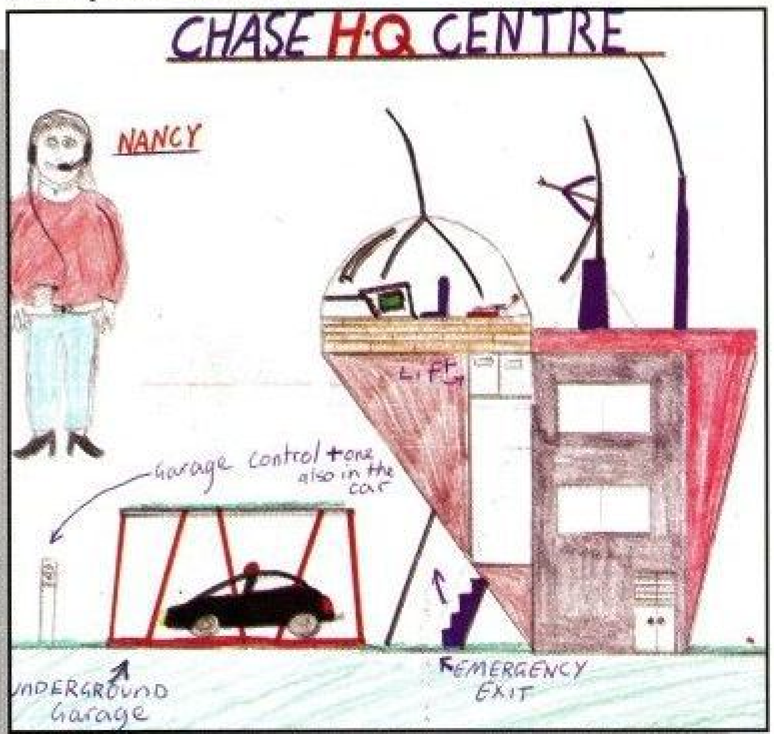
We had so many entries for the March Chase HQ competition that we've actually managed to cover the entire office with your colourful posters. It beats wallpapering hands down and the ACU team is beginning to think it's got a big of culture. Never fear! Anyway, to get to the serious stuff, the lucky winner of the over 14 section who wins a great day out at the Brands Hatch gokarting centre, is Ruth Redpath of Grimsby, South Humberside. The under 14 winner, who will walk away with a fabulous remote controlled Porsche is Andrew Oliver of Harnhamyn Wiltshire. They will also be getting game copies and goodies, as will the ten runners up, who will get their goodies soon. Unfortunately, we haven't got room to print all of the winners, so here are a few examples of the great quality of entries.



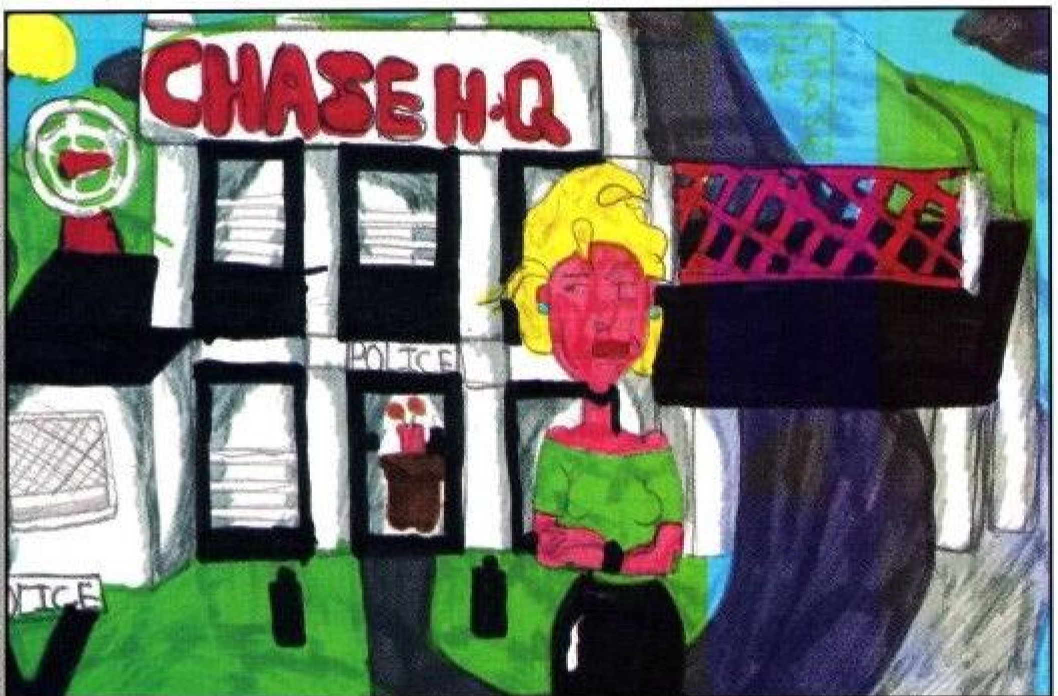
Simon Dawson, Sunderland, Tyne and Wear.



Alex Olver, Salisbury, Wiltshire.



Ricky Sharman, Letchworth, Herts.



Daniel Goddard, Basingstoke, Hampshire.



Mark Oakshott, Hampshire.

Special Reserve Official Secrets Special Reserve Official Secrets Special Reserve Official Secrets Special Reserve Official Secrets Special Reserve

JOIN THE CLUB!

If you're looking for the best prices, best games, best offers and best service, then join **Special Reserve**. Or join **Official Secrets** if you're looking for more...

Special Reserve £5.00

Club Privileges All club members benefit from:

- Special offers: at prices you might not believe!
- Bi-monthly Buyer's Guide each with details of 40 games, building to a valued reference.
- Membership card with privilege number, and folder for the Buyer's Guides.
- FAST despatch, normally the day after receipt of order. Most lines in stock.
- Each product sent individually by 1st class post. Many will fit through your letter-box.
- 7-day sales hotline, open until 8pm weekdays, 10 to 5.30 Saturdays, 11 to 5 Sundays.
- Written order confirmation and receipt. Order query line manned weekdays.
- New titles may be ordered in advance and will be despatched upon publication.
- Instant refunds available on request for delayed titles.
- No commitment, no obligation to buy anything and no "minimum purchase".

Prices include VAT and carriage

All the best software, carefully selected and available to members only at truly extraordinary prices. You can buy at the same time as joining - or join now and select from our catalogue. There is no obligation to buy anything.

Games	RRP	SRP
BOB WINNER (ACTION)	24.95	8.49
BRIAN CLOUGH'S FOOTBALL FORTUNES	14.99	8.99
BRIDGE PLAYER 2150	29.95	19.99
CLASSIC GAMES 4 (BRIDGE 2000, CHESS 88, BACKGAMMON, DRAFTS)	19.95	13.99
CLOCK CHESS '89	19.95	13.99
COLOSSUS CHESS 4	17.99	10.49
CYRUS CHESS 2	24.95	6.49
DISTRACTIONS (4 GAMES FOR 8256)	19.95	11.47
GIANT KILLER (MATHS 9-14 YRS)	14.95	10.99
HEAD COACH (US FOOTBALL)	19.99	13.49
HOME ENTERTAINMENT CTR	19.99	12.99
PCW CHALLENGE (ACE, SKYWAR, STRIP POKER, FORMULA 1)	19.99	13.49
PRO POOLS	44.99	24.49
PRO PUNTER	59.99	31.99
SCRABBLE	19.95	13.49
SPORTING TRIANGLES	19.99	12.99
STARGLIDER (8000)	24.95	7.99
STEVE DAVIS SNOOKER	17.99	11.49
TETRIS (8000 SERIES)	19.99	6.99
TOMAHAWK	19.95	13.49
TRIVIAL PURSUIT	19.95	8.49
WORLD OF SOCCER	19.99	13.49
YES CHANCELLOR! (ECONOMY SIM)	14.95	10.99

Adventures	RRP	SRP
Level 9		
GNOME RANGER	14.95	9.99
INGRID'S BACK	19.95	9.99
LANCELOT	19.95	12.49
SCAPEGHOST	19.95	12.49
TIME & MAGIK	14.95	10.49
Magnetic Scrolls		
CORRUPTION	24.95	15.49
FISH!	24.95	15.49
GUILD OF THIEVES	24.95	15.49
JINXTER	24.95	15.49
THE PAWN	24.95	15.49
Infocom		
LEATHER GODDESSES (8000)	24.99	12.49
STATIONFALL	24.99	12.49
Abstract Concepts		
MINDFIGHTER	24.99	7.99
Artronic		
PCW ADVENTURE (8000)	14.99	10.49
Topologika		
ACHETON	14.95	10.99
AVON	14.95	10.99
COUNTDOWN TO DOOM	14.95	10.99
KINGDOM OF HAMIL	14.95	10.99
LAST DAYS OF DOOM	19.99	13.99
PHILOSOPHER'S QUEST	14.95	10.99
RETURN TO DOOM	14.95	10.99

MAXELL CF2 3" DISK 1.89

Utilities	RRP	SRP
AMS COMPLETE DESK TOP PUBLISHER WITH MOUSE	69.95	48.99
AMS STOP PRESS DESK TOP PUBLISHER	44.95	28.49
AMS STOP PRESS DESK TOP PUBLISHER WITH MOUSE	79.95	54.99
DEVPAC 80	49.95	39.99
GRAPHICS PLUS (8000 SERIES)	24.99	16.99
LIGHTNING BASIC PLUS	24.95	16.99
LOCO SPELL	19.99	13.49
MASTERFILE 8000 DATABASE	49.95	32.99
MONEY MANAGER PLUS	39.95	26.99
PROTEXT WORD PROCESSOR	59.95	37.99
SUPERCALC 2 SPREADSHEET	69.99	49.99

Official Secrets £22.00

Confidential 32-page A4 bi-monthly glossy magazine

Confidential is written for people who take their fun seriously. If you are into Adventure, Strategy, FRPs, MUGs, PBMs, D&Ds, or if you would simply like to see more from behind the scenes then Confidential is essential reading. Regular features include Personnel File, Dead Letters, The Man in Black, Feature Articles, Brain Teasers, Diary, News, Competitions, and The Boss Upstairs. Club participation is welcomed.

Gnome Ranger Level 9's award-winning 3-part adventure

Starring Ingrid Bottomlow. "Go out and buy *Gnome Ranger* pronto" said Atari ST User. If you already did please tick the box for a Surprise Alternative.

Help-Line Manned weekdays and Sundays

Advice and hints to help you solve most games.

Special Reserve Included in the membership fee

All the features and benefits of Special Reserve membership.

Myth A mini-adventure by **Magnetic Scrolls**

Magnetic Scrolls, authors of ***The Pawn, The Guild of Thieves, Jinxter, Corruption*** and ***Fish!*** have now written ***Myth*** exclusively for members of Official Secrets. Amazingly enough, it is included in the price of membership. Set in Ancient Greece, you play the part of a young god striving to prove himself worthy of immortality. You'll meet the Ferryman, have a chance to cheat Death, and do battle against the nine-headed Hydra guarding the gates to the Underworld. *Myth* includes the state-of-the-art Magnetic Scrolls parser and those incredible graphics. For most computers - disk only. Only to members of Official Secrets - Free - Out Now.



Myth Reviews

Crash Smash 91%, Commodore User 90%, Amiga Format 87%, TGM 85%

SALES LINES **0279 600204**. PLEASE NOTE THAT THERE IS A SURCHARGE OF 50P PER GAME FOR ORDERS PLACED BY TELEPHONE.

Order Form Non-members please add the membership fee

Name ____________________

Address ____________________

Post Code __________ Phone No. __________

Computer __________ *5.25"/*3.5"/*3.0"/*TAPE

Payable to: Special Reserve or Official Secrets
P.O. Box 847, Harlow, CM21 9PG

Special Reserve and Official Secrets are trading names of Inter-Mediates Ltd. Reg. Office: 2 South Block, The Maltings, Sawbridgeworth, Herts CM21 9PG. Registered in England Number 2054713. VAT reg. no. 424 8532 51

Existing members please enter your membership number.
Special Reserve membership £5 UK, £6 EEC, £7 World or Official Secrets membership £22 UK, £25 EEC or £30 World £
with Gnome Ranger and Myth ☐ or with Surprise Alternative and Myth ☐

Item __________ PCW £

Item __________ £

☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐ TOTAL £

Credit card expiry date __________

*CHEQUE/*POSTAL ORDER/*ACCESS/*VISA (Including Connect, Mastercard, Eurocard, Switch etc)
* Delete where applicable

Overseas orders must be paid by credit card
Prices include UK Postage and Packing
EEC orders please add 70p per item
World orders please add £1.50 per item

This month the ACU team hits the tarmac to test drive Accolade's Grand Prix motorcycle extravaganza, The Cycles, takes on the evil forces of Dr. Victor Von Doom and tries out the Rasterfield for size.

GAMEPLAN



THE CYCLES

Don racing leathers and burn rubber in your quest for the Grand Prix championship.



DR. DOOM'S REVENGE

Treacherous villainy is afoot and only Spiderman and Captain America can save the day.



RASTER RUNNER

A budget game with a difference as you ride towards certain death on the plasma-bound Rasterfield.

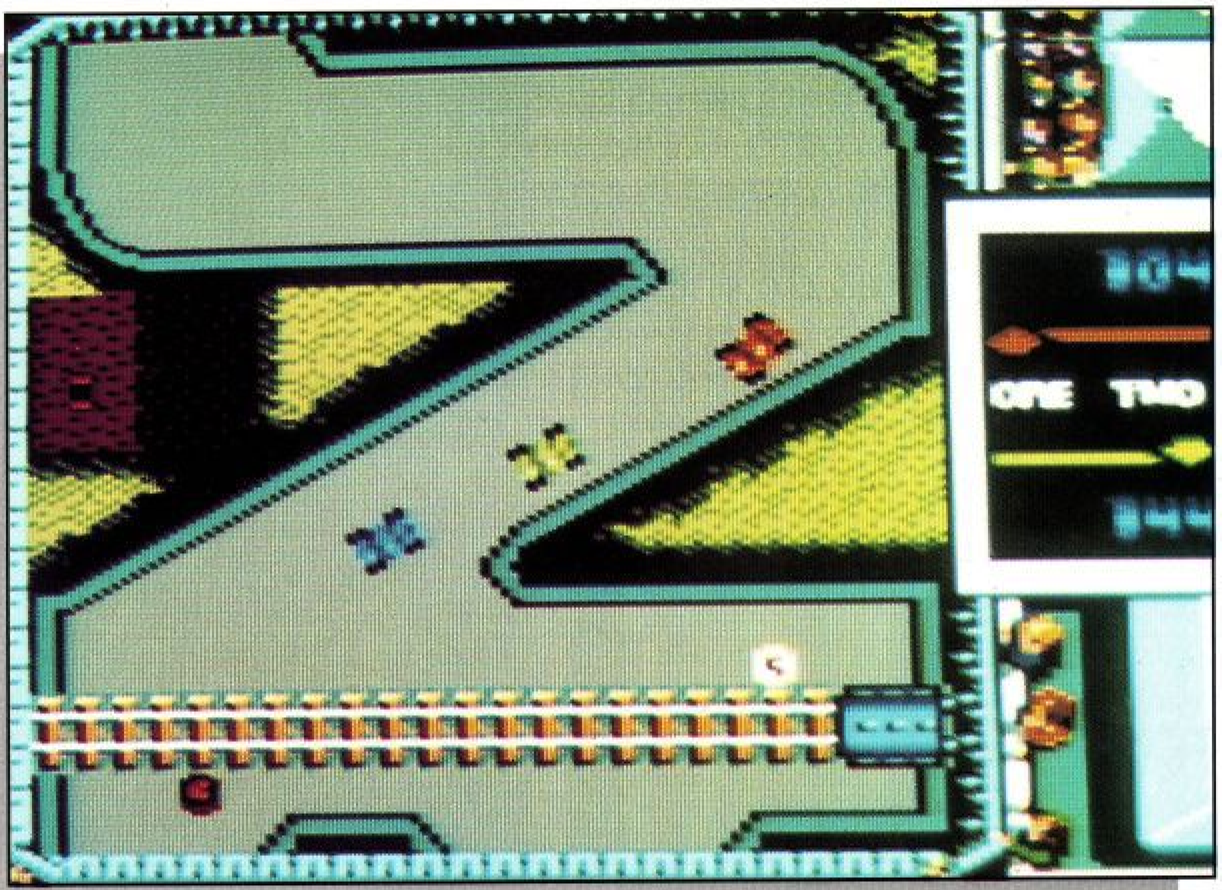
PLUS

Hot Rod, 4th Dimension, Bloodwych, Pro-Boxing Simulator and five of the latest budget releases hot off the presses.

TOP 20

Pos	Last	Title	Publisher
1	(2)	Fantasy World Dizzy	Code Masters
2	(1)	Paper Boy	Encore
3	(5)	Pub Trivia	Code Masters
4	(NE)	Ikari Warriors	Encore
5	(NE)	1943	Kixx
6	(3)	Buggy Boy	Encore
7	(4)	Chase HQ	Ocean
8	(7)	Batman The Movie	Ocean
9	(NE)	2 Player Super League	Cult
10	(6)	Combat School	Hit Squad
11	(9)	Spy Vs Spy 2	Hitec Software
12	(NE)	Night Raider	Kixx
13	(NE)	Captain Blood	Players
14	(NE)	Four Soccer Simulators	Code Masters
15	(NE)	World Champions	E&J Software
16	(NE)	Arkanoid	Hit Squad
17	(NE)	Rainbow Islands	Ocean
18	(11)	Robocop	Ocean
19	(14)	Ghostbusters 2	Activision
20	(NE)	Future Bike Simulator	Hitec Software

Last month's position in brackets
Top 20 compiled by Gallup



Hot Rod

Here we go with some well hard rod racing. Formula One was just a kids game, as those def folks at Activision have got round to convert the Sega Coin-op Hot Rod into one mean mutha of a car game.

So, according to the press release that accompanies the game, if you really "Want to burn some rubber? Feel the need for speed? Then take on hot rod'. Well, I'm a bit of a car racing fan so I decided that enough was enough and after being excited by the press release, it was time to load up the game and give it my best shot.

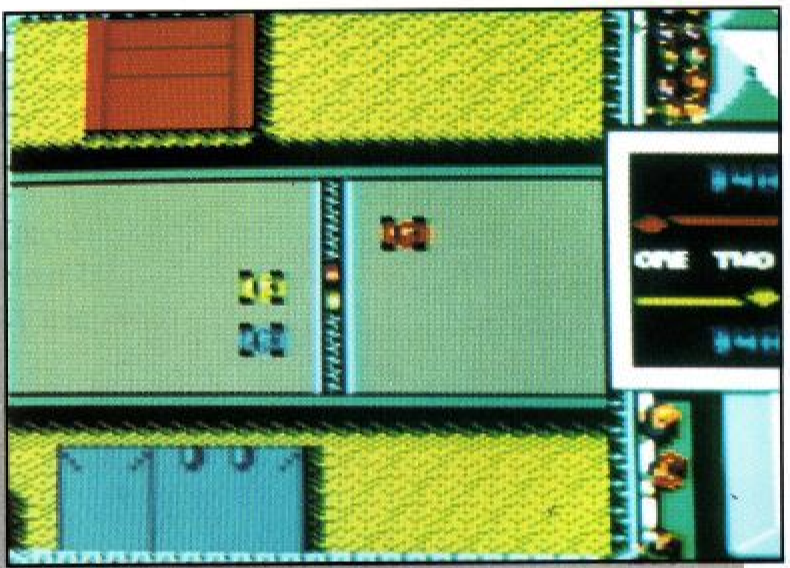
Hot Rod is a multi load game, so you will need to load in each section as you proceed. Each section of the game pits your skills against two other hot rods, or if you wish to play two player mode, you and a pal against the computer controlled hot rod. Gameplay is quite easy, as there are only three controls you will need to use. Accelerate to gain speed and left and right to allow you to control your steering wheel once you have put your foot down hard on the acceleration pad. In order to hinder you in the quest to become Hot Rodder numero uno, there are a number of obstacles and weather conditions which will slow you down. These will range from rock slides and slipper sand which may lead onto fatal results if you are unable to control your hot rod, through to adverse weather conditions such as snowdrifts, rain and ice. Then of course you have to be careful to make sure you don't run out of fuel, because if you do, you can't complete the course. So, it becomes a must to keep control of the amount of fuel being burnt up. Other problems you will encounter are construction crews and police cars who will try and hinder your progress.

So once you have managed to win a race, you will then have the option to make your hot rod bigger, badder and faster and do even better against the other hot rodders in your forthcoming games.

It's been several months coming, but Activision has managed to deliver a fast and furious racing game. The graphics may be a bit on the small side and not very well defined, but they are effective and you do get a sense of action when they are moving. Sound and music are good, being not too much, nor too little. The only problem is the multi load, especially if you are a 464 owner, having to load section by section does get a bit boring, especially when you want to replay the current screen you have just lost out in against the computer controlled hot rodders.

For what it is, Hot Rod is not too bad, for its price, a bit over the top. My advice, wait a month or so until you see it appear on a compilation and then go out and get it as part of one.

Leslie Bunder



ROUND-UP			
NAME	Hot Rod		
FROM	Activision	PRICE	Disc £14.99 Cassette £9.99
60%	65%	65%	CURRY
GRAFFIX	SONIX	PLAYABILITY	VERDICT

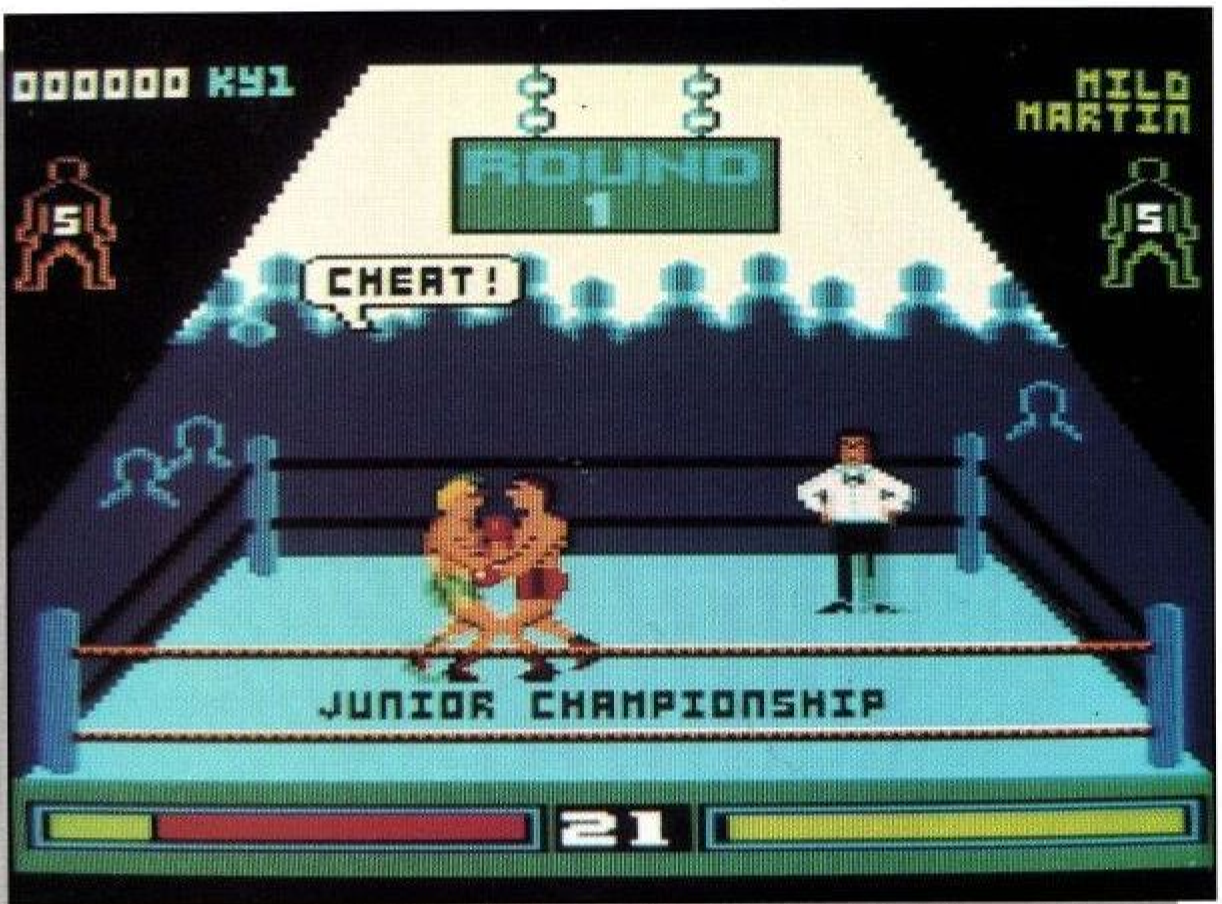
Pro-Boxing Simulator

No pain, no gain action as you slug it out for the world championship.

Your gloves are wet. You don't know whether from blood or sweat and it really doesn't matter which at this stage in the fight; fourteen rounds down, one to go.

It's been hard, and even though Tyson is only a round or two ahead of you on points, the pain in your stomach and the swelling around your eye tell you that only a knockout is going to impress the judges now.

As you come out for the final round, just touching gloves with your ferocious opponent brings tears of pain to your eyes and as the lightning fast gloves start raining punches down on you again, you realise that you just don't have the strength to land that all-important punch.



Half a minute to go and the fat lady is about to start singing over your tired career when suddenly you see the referee looking over to the judges. "What if..." you think to yourself. Without thinking too hard on the subject you summon up what energy you have left to bring your forehead hard down onto the bridge of Tyson's nose. Crunch! With blood pouring from both nostrils, Tyson crumples to the deck amidst cries of "Foul!" from his corner.

You glance over to the referee. He hasn't seen it and as your strength deserts you, he hops over to lift your arm; Heavyweight Champion of the World.

Yes, cheating is the name of this game. Starting off as a junior, your aim is to take on all-comers to grab the coveted World Championship title.

At the sound of the bell, you come out fighting. Obviously, you can fight a clean fight if you want, and there are more than enough standard moves for you to make if you do. But, there are also the slightly less subtle and slightly more illegal moves, such as the head butt, groin punch, knee and kick to make sure of your opponent's fate.

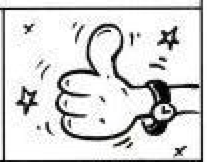
In each contest, you are allowed five lives, which decreases every time you lose a round or if you are caught cheating. The number of lives remaining can be seen at the top of the screen; watch these spaces carefully, as they also indicate your chances of getting away with a foul move. If the colour is red, you stand little chance but as soon as the green light shows, do your worst.

For each punch you take, your energy is reduced, which could lead to a knockout and loss of a life. Energy is restored at the beginning of each round and whoever has most at the end of them wins the round.

Pro-Boxing Simulator will have you sharing the sweat of the fighters, if only because of the complexity of the controls. Mastering them will take some time, especially on the keyboard. This is, however, one of the only drawbacks of a game which is graphically good with some lovely sound effects. For boxing fans, this game will take some beating (if you'll excuse the pun).

Stewart Lard



ROUND-UP			
NAME	Pro-Boxing Simulator		
FROM	Code Masters	PRICE	Cassette £2.99
75%	72%	70%	
GRAFFIX	SONIX	PLAYABILITY	VERDICT



4th Dimension

Take your pick from Hewson's four-in-one challenge compilation

Here we go with yet another CPC games compilation. The number of games compilations entering the software scene is getting greater and greater. Over the last few months, we have had the good, (The Biz), the bad (Coin-op Hits) and now Hewson have entered the fold with the ugly in releasing 4th Dimension. Hewson seem to be rather proud of this compilation, billing it as "three previously unreleased Amstrad titles plus one of Hewson's most acclaimed titles combine to form one of the best compilations of 1990". Who do Hewson, think they are kidding? Only one of the four games is anyway worthy of a general release. The four titles consist of Battle Valley, Supercup, Herobotix and Anarchy.

In Battle Valley, you are a tank scrolling across the screen with the aim of trying to shoot everything in your way, both near you and also flying above you. The graphics are quite crude, the gameplay not very entertaining and the sound is very basic. In fact the game reminds me of another game called Loco which came out about five years ago. Battle Valley wasn't even fun to play as there was not really much to do apart from watch the screen and get bored.

Next up was Supercup. Well, if you are looking for a footie game to play, this certainly is not the one you should look for. Once again the graphics were crude, the gameplay was boring and overall it wasn't very much of a challenge. The way it played was an overhead view and you are given a full eight ways



in which to move your character. Super Cup does have some redeeming sound effects, though, sound effects do not make a great footie game.

Herobotix has you as a droid which you must guide in retrieving the Z Ray Particle Accelerator from the dreadful alliance of space pilots. Yawn, yawn, yawn. The graphics are surprise, surprise, bad to say the least and the gameplay makes you want to spend maybe two minutes maximum playing it. So for two minutes of fun (and I use the word fun in a very loose sense), it is worthwhile looking at.

The final game in this package is actually quite a respectable release. Anarchy is an arcade strategy style game. Graphics are simple but effective though at times there are some unfortunate colour choices which make it a bit difficult to see the screen. Gameplay is excellent and had me playing the game for quite a few times as I went about my task of trapping baddies and exploding weapons located all around the screen. Sound and music thankfully existed and were both good. Overall, Anarchy was a good fun way of spending some spare time.

Well, if it wasn't for anarchy I wouldn't recommend this package at all. So save yourself a small fortune and wait until Anarchy is re-released as a single budget game and then you will have a real bargain, buy it with the other games, and you've been badly ripped off.

Leslie Bunder

ROUND-UP			
NAME	4th Dimension		
FROM	Hewson	PRICE	Disc: £17.99 Cassette: £12.99
20%	10%	35%	
GRAFFIX	SONIX	PLAYABILITY	VERDICT



Raster Runner

Mount your trusty plasma bike and prepare to dice with death on the Rasterfield.

Do you remember watching that fantasy epic Tron? You know, the one where computer boffin Jeff Bridges gets ripped off by an evil conglomerate and tries to break into their system, only to find himself disintegrated by a laser beam and transformed into a computer sprite. Very unfortunate.

Anyway, while he is there, he gets roped into a death-defying motorcycle race with two of his companions on the Rasterfield, where the only normal outcome is a one way ticket to sprite heaven. Well, as you all probably know, he escaped and they all lived happily ever after, but that's another story.

This one is all about that motorcycle race in question, and they are not called motorcycles, but Plasma Bikes. Quite what Plasma Bikes are supposed to run on, I don't know. Plasma, I suppose. One way or another, it is the twenty third century and the nation's favourite pastime is to get down to the arena to see the Raster Runners at work. These heroes are the new equivalents of our contemporary Barry Sheenes and Randy Mamolas; the fastest things on two wheels and you have the chance of joining that hall of fame.

The Rasterfield is a large square arena laid out into a grid upon which you must race to the death against your opponent or the computer. The idea of the game is to make sure your opponent bites the dust before you do, leaving you to take all the glory, for one round, that is. In each competition, both Runners have ten lives which means the whole race could be over in ten swift rounds, or it could just as easily be thrashed out over nineteen rounds.

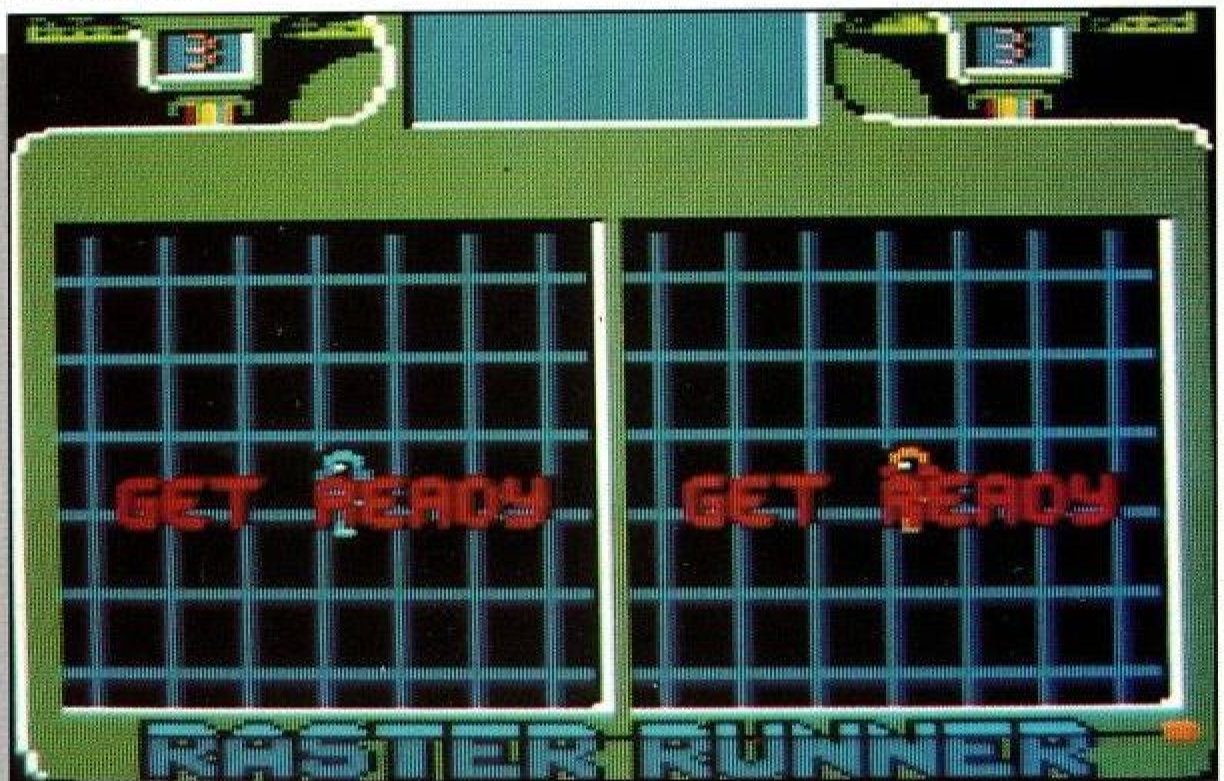
Playing the computer gives you a difficulty option which is handy, but all of the levels seemed difficult to me as I pitted my wits against wily old Arnold. As the two bikes shoot into the fray, they leave behind them a solid trail of plasma. Hit any of these trails or the boundary wall of the arena and it's curtains for you. Just to help you out, you are allowed three energy shields in each round. Press fire to operate them and while your bike is flashing, you can pass through a trail unharmed. Remember to use them sparingly though.

Using a central radar screen you can tell exactly where you are on the arena, and there are also two more screens showing close-up detail of how close you and your opponent are to the trails and each other. Keep your eye on all three screens and you'll have the beating of your fellow Runner.

Raster Runner is a simple game, but it is incredibly playable and you will certainly get a kick out of forcing your opponent into instant obliteration against the trail. It is quite colourful and scrolling is effective within the confines of the screens.

As the meaty buzz of the Plasma Bikes fills the air, this is one showdown you can't refuse.

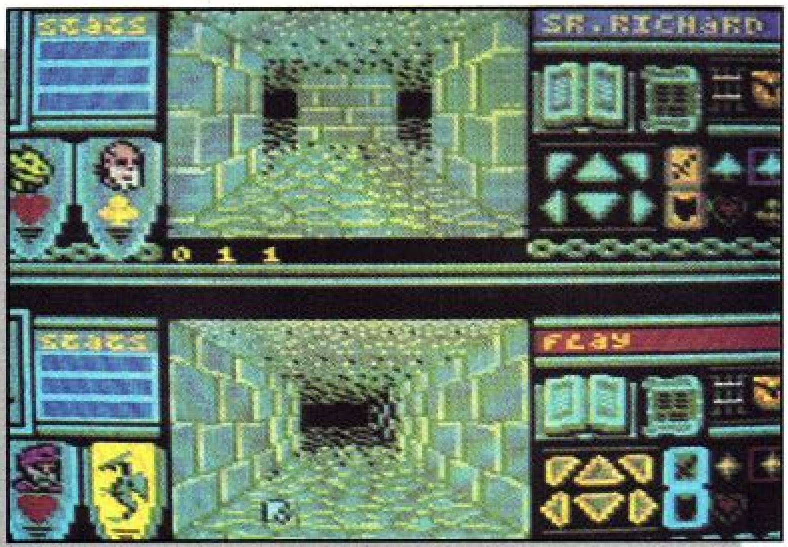
Gus Graham



ROUND-UP			
NAME	Raster Runner		
FROM	Mastertronic	PRICE	Cassette £2.99
76%	72%	83%	TNT
GRAFFIX	SONIX	PLAYABILITY	VERDICT

Shock! Horror! Yes, Bloodwych has reached the hallowed pages of ACU for the second time, but when we reviewed it last time, we did not think it would take so long for this epic to hit the streets. For those of you unfortunate enough not to have read our preview of last year, here are the goodies one more time.

Outside the gate of the castle of destiny you stand alone, the midnight wind, too lazy to find its way around





Bloodwych

Be sure to pick your partners well before setting out to face the forces of evil.

you, blows straight through your heavy clothing to chill your very heart. Before you lies your quest to battle against the forces of evil to save the Earth

Within the labyrinthian tunnels of the castle lies the power to cleanse the world of all evil, or send it into a spiralling nightmare of corruption and horror. The key to this great spell of power for good or evil are contained in four crystals hidden in awkward places around the castle.

In your attempts to locate the crystals, you will have to solve a number of tricky puzzles and work out the meanings of numerous artifacts. You will also, of course, come face to face with a whole host of evil cronies hell-bent on fitting you out with cement overshoes and throwing you in the moat.

You start off on your quest on your own, but what makes the game even more fun is the chance to add to your party. A little boasting and a little flattery will get you a long way on the recruiting side, and it sure beats hacking away at limbs the whole time.

In Bloodwych, talking is of the utmost importance, not only for recruitment, but also for digging out information, and a smart communications menu is available which allows you to flatter, bribe and insult whoever you want to.

If you are playing a two player game, it is always nice to extract the information you want before doing away with the stranger, leaving your playing companion in the dark.

It is the two player game, in fact, which puts Bloodwych out on its own. With real rime 3D action, each player has his own display and control via joystick or keyboard will see you selecting icons to activate locks, throw spells or fight.

On adding to your party, be sure to have a mixture of characters. A party of thugs may sound heavy, but when the spells start flying, you'll wish you'd brought along a magic user to pump up and send a bolt of power down the corridors and deal your companion a dirty stroke. Another important aspect is to keep your party in order.

In a very neat piece of programming, you can praise or subdue your sprites. Too much flattery and they will become cocky and reckless. Tell them off and they will sulk miserably. It's up to you to find the right balance.

Bloodwych is an exceptionally playable game with excellent graphics. As you creep around the grey, green dungeon walls you will see tapestries, some of which are for decoration only, but others contain vital clues.

For plenty of action and a good dose of fun, Bloodwych is the place to be. Never has it been so exciting to go adventuring together with a friend.

Alan Greaves

ROUND-UP			
NAME	Bloodwych		
FROM	Image Works	PRICE	Disc £14.99 Cassette £9.99
75%	86%	88%	
GRAFFIX	SONIX	PLAYABILITY	VERDICT



Dr Doom's Revenge

But wait! Here come the superheroes

Picture the scene. Evil Dr Victor Von Doom (Vic to his mates), sole ruler of Latveria, has decided to go for global domination. So what does Vic do? well he has somehow managed to steal a top US made nuclear missile and now plans to launch the warhead at New York City and blow it all out of proportion unless the United States surrenders and agrees to become a colony of Latveria with Vic ruling supreme over the good old US of A.

Given the ultimatum of surrender or face destruction, the President of the US and his cabinet decided it was high time they got a superhero to help them out. Rather than asking just one superhero (maybe the job is too big to be handled just by one), they have decided to enlist the help and support of two. Enter Captain America and Spider Man. Armed with their skills and strengths, and no doubt a passport, this dynamic all American duo must set off for the far and distant land of Latveria where they must stop the launch of the warhead and apprehend the dreaded Dr Doom.

In order to make his fortress as difficult to enter as possible, Dr Doom has been on a recruitment drive to hire some similar like minded Super-Villians such as Batroc, Machete, Oddball and more. Each Super Villain has a particular different strength. For example, Maxwell Dillon is able to shoot lightning bolts from his fingers and Eduardo Lobo has razor sharp claws.

So, after a number of years, we have another game based around several characters from the famous Marvel Comics. In Dr Doom's Revenge you the player must take on the role of your two superheros, Spider Man and Captain America. In order to go from screen to screen you will have to do combat against the baddies. But before even that starts, when you first load the game, you must select your options as to the difficulty of the game. There are three options: beginner, hero or superhero. Once selected you are then asked a number of questions about characters in the game to make sure you are not playing a pirated version. So it really does pay to read the whole manual, or else if you get a question wrong the program crashes and you must start again.

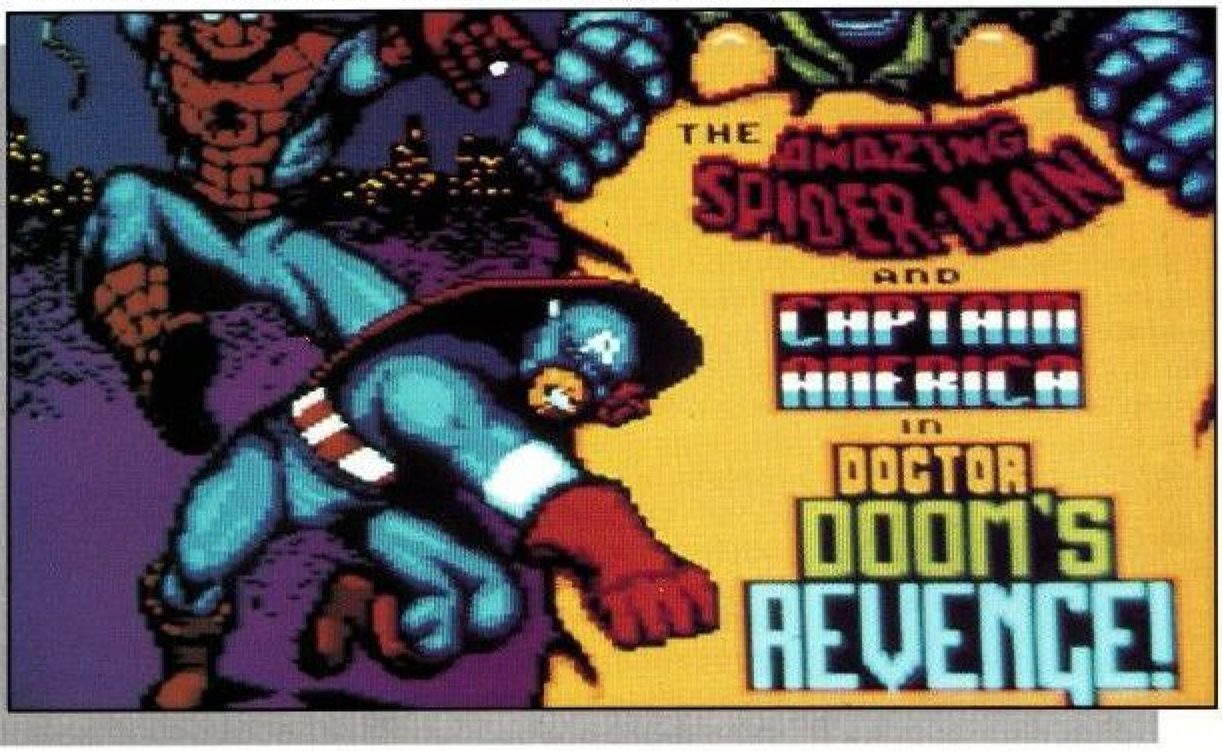
The actual combat games are very similar in game play to those classic Karate style games of a few years ago. Except, as well as doing sweeping kicks, jumps, somersaults and so on, add to your choice of moves those which Captain America and Spider man can do. Captain America can use his famous shield and give the villains a big thumping with it. Spider Man can throw webs as well as being able to stick to the ceiling.

The game is quite good fun, unfortunately, it does not offer much of a long lasting challenge. For example, if you press your joystick to hit mode the villain, and leave your hand on it, you will find yourself winning that screen quite easily, as the villain is beaten up every time he comes close to your action.

The graphics look very nice and when the characters are moving, it is quite smooth and detailed. Sadly, there isn't much in sound except for a few noises during fighting. Why there wasn't a theme tune or some other form of music added to the game seems a bit strange to say the least.

If you are looking for a fun game which is also quite disposable, then check this out, otherwise wait until it comes out as a budget game.

Leslie Bunder



ROUND-UP			
NAME	Dr Doom's Revenge		
FROM	Empire	PRICE	Disc: £14.99 Cassette: £9.99
55%	30%	60%	
GRAFFIX	SONIX	PLAYABILITY	VERDICT

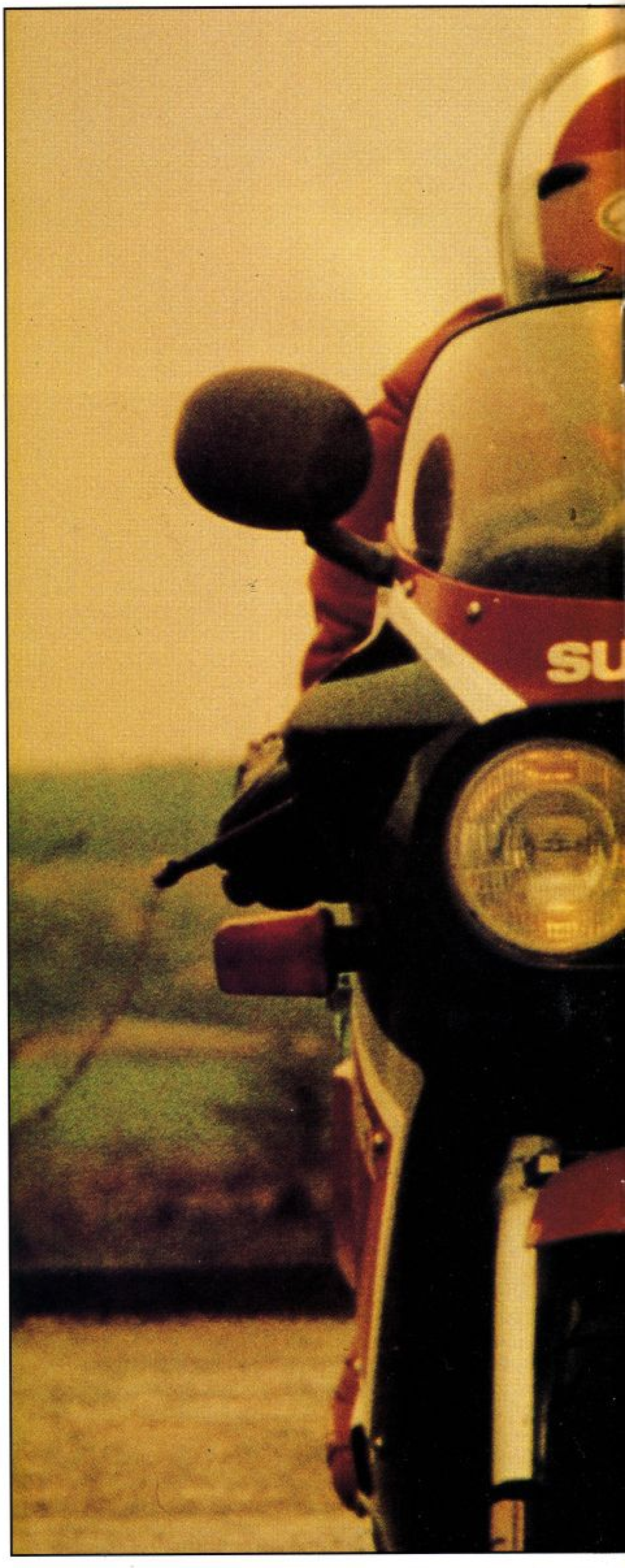
Tearing around the last bend for the home straight it's a head on battle with last year's Grand Prix Champion Kevin Krauser. Turning your head just enough to catch a glimpse of his shocking yellow racing colours you see a small puff of smoke as his back tyre momentarily loses grip on the greasy tarmac. It's not much, but it's the only chance you've had throughout this gruelling challenge in the blazing Australian heat, and you've got to make it tell.

Next stop is the Laguna Sega circuit in California, with its long straights and the chance to burn some serious rubber. Then it's off to Spain and the winding Circuito de Jerez, followed by the fast Misano track in Italy.

Good performances in these opening rounds and the sharp hairpins of the French Bugatti circuit will see you coming home to Donington Park in an unassailable position to delight the crowds with your racing skills. With the final challenge on Sweden's

The Cycles

Pull back the throttle on 500 cc's of raw power as you race towards the chequered flag.



You straighten up, kick down into sixth gear, and pull the throttle back on 500 watercooled cc's of raw power. G forces threaten to leave you behind as your supercharged cycle makes for the chequered flag and as the black and whites come fluttering down before your eyes you chance a look behind you to see Krauser cursing his luck in your wake. The Philip Island title is yours, along with valuable points to prop up your first place position in the championship ratings.

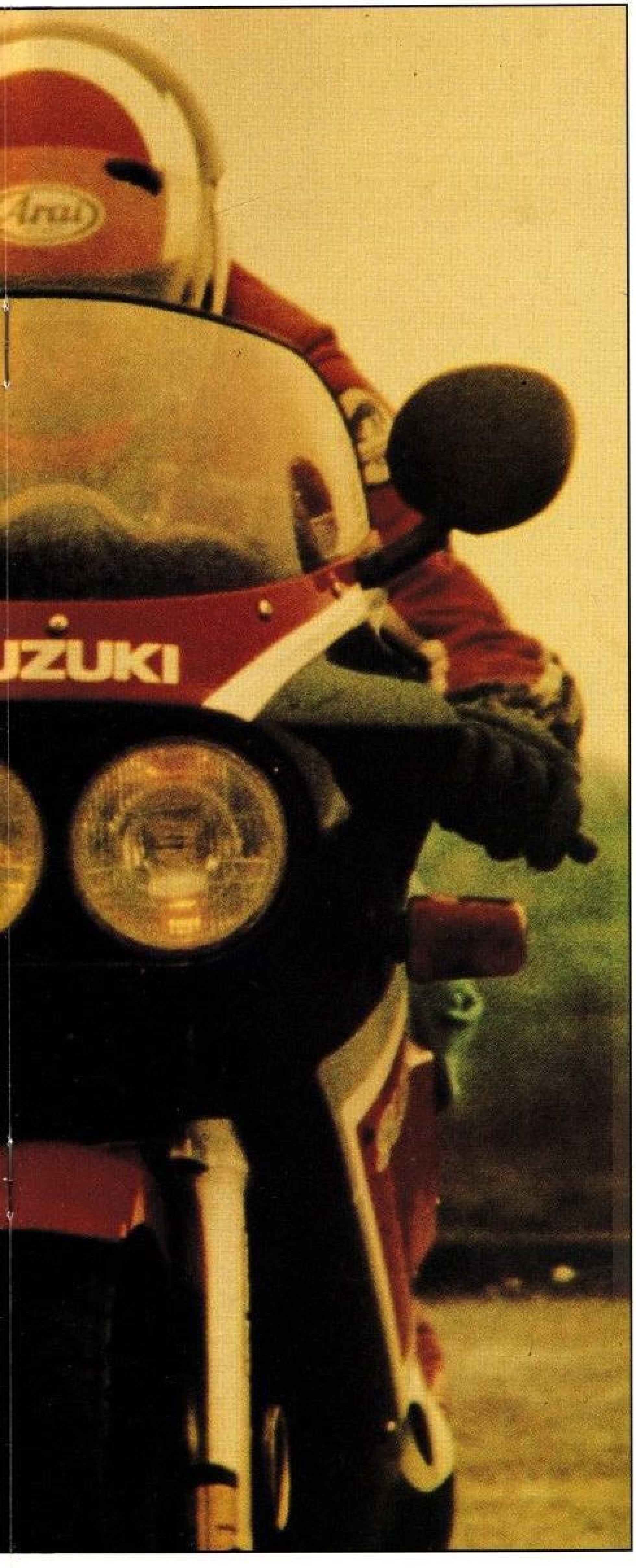


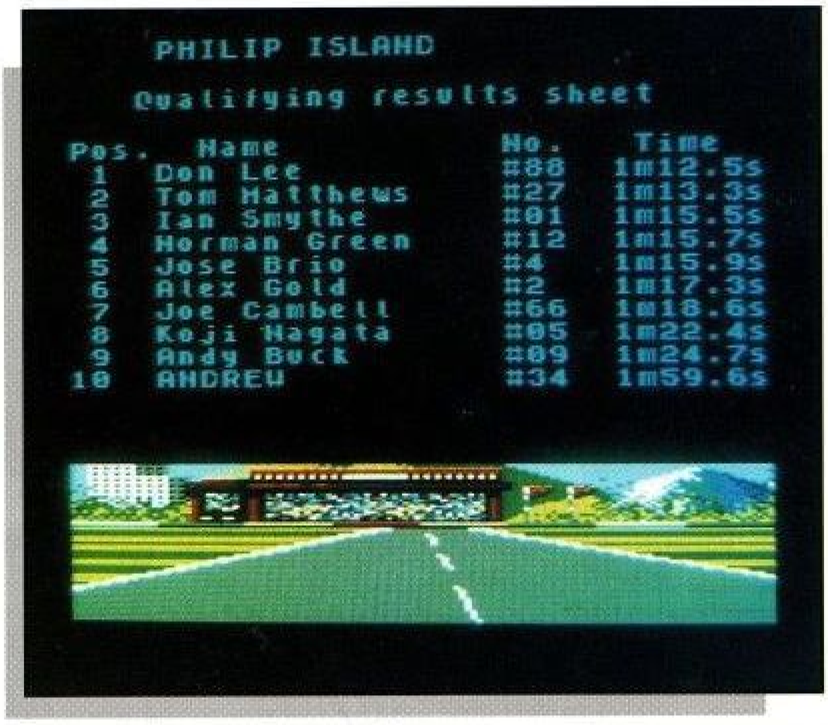
First place on the long and treacherous Japanese Suzuka circuit followed by your brilliant performance in Australia has given you a wonderful start to the season, but there is still a long way to go and five more races before the championship is decided.

Scandinavian Raceway a mere formality, you can drown in the glory of the shaken champagne magnums.

The Cycles is all about the power and the glory. As you struggle through the seven races on offer in the championship competition, you get to know all your opponents' strengths and weaknesses. Keep a sharp eye on the track and your revs up and they'll have difficulty in keeping up but, if you miss a corner and leave the road, they are right there to punish you and leave you floundering in the dust.

As you start your career as a title hopeful, there are five levels of difficulty to choose from. For novices gear changes are automatic and help you to glide through the sharpest of corners with power enough to pull out into the straights. As you progress with your skills, you can opt to take over with the gears but be careful, you can only change up or down if you're accelerating or decelerating by hitting the fire button. Try to change gear while the joystick is in neutral, as it were, and you will lose valuable





time.

The normal length of a championship race is three laps, but if you prefer a sudden death or an endurance trial you have the option of changing the distance to your liking. Well, it's nice to stack the odds a little higher in your favour, isn't it?

For more sedate players, there is also a single race option to avoid the hurley-burley of the championship and you can get in a spot of training on the practice tracks to improve your tactics.

Another nice touch is the choice of racing machines, ranging from a wiry 125cc engine, through the 250cc specials to the heavyweight 500cc monsters, burning up roadspace at terrifying speeds and giving a little extra weight on cornering.

Graphically, The Cycles is excellent as you view the track from the rider's eyes. The track scrolls relatively smoothly towards you and the grandstand scenery is impressive. The game is one of concentration as you try to stay on the road which means the continuous motorcycle revving sonix, which can be a little monotonous, do not detract from the enjoyment of the game. You can even play with the sound off as the rev counter will tell you when you need to change gear.

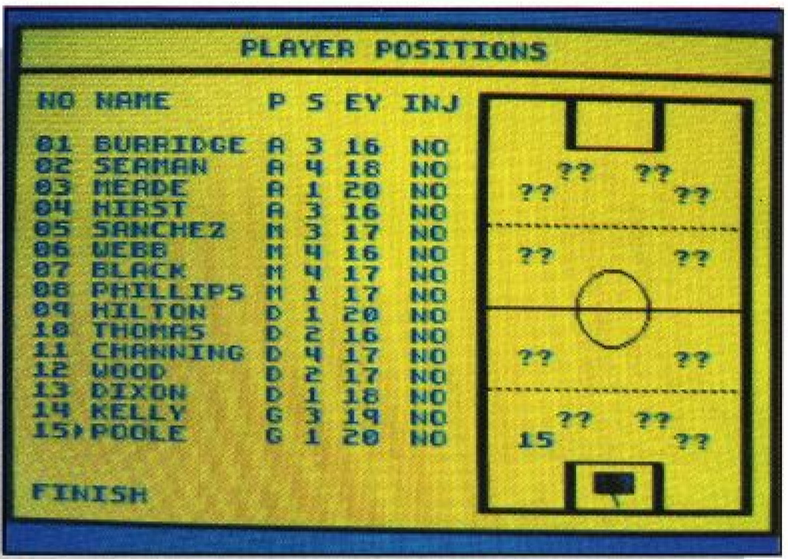
Handling the bikes will take a little getting used to, as they are extremely sensitive to the joystick controls. If you leave the track, don't over-rectify or you'll find yourself on the grass on the other side of the track as your opponents take advantage of your plight. Using the cursor keys will give you a little more control until you get into the swing of things.

With the personalised nature of the Grand Prix circuit, The Cycles is a game which will keep you coming back as you try to outdo your rivals and you'll certainly get to love to hate the regular circuit winners thrown up by the computer. The championship is yours for the taking.

ROUND-UP			
NAME	The Cycles		
FROM	Accolade	PRICE	Disc £16.99 Cassette £9.99
82%	68%	87%	JACKPOT
GRAFFIX	SONIX	PLAYABILITY	VERDICT

Budget Basement

Stop the presses for the latest budget offerings



Who will you pick?

SUPERLEAGUE

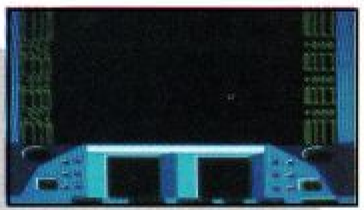
Pull on your sheepskin jacket and put on your warmest hat; it's time to play football manager again. Not a bad offering this from Players. there are the usual options, such as loading games into the program, buying and selling players, and organising leagues. Super League could do with a little more colour for more interesting viewing, but what gives it a nice edge is the crowd feature during the games. Crowd violence could lead to fewer attendances and less revenue, so you'd better pick the right team and keep your supporters happy.

HOPPING MAD

You've got to be one jump ahead to get on in this game. Starting off with four shiny balls, you have to avoid globe-eating plants, birds, hedgehogs and a whole cast of other obstacles as you bounce along in the undergrowth in your quest to gobble up balloons. If you manage to get ten before all of your balls have been destroyed, you are through to the next round and the obstacles get worse. Hopping Mad is fun and good to look at as well with clear, nicely scrolling screen. Try not to bounce too fast though.



Globes galore



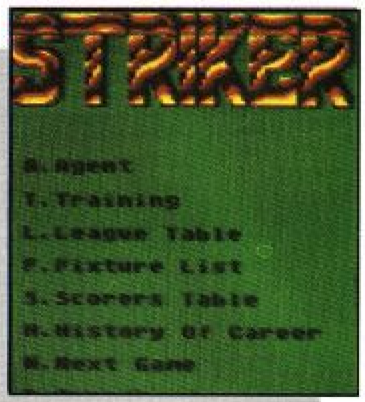
Star trekking

ENTERPRISE

Budding young entrepreneurs could certainly learn a lot from this smart offering from Mastertronic. The story so far? You have stolen a spaceship in an attempt to make money through mineral trading and are now hoping to make enough to buy you a one way ticket to the Paradise Planet to escape the long arm of the law. There is plenty of action as you pick which planets to visit and ply your trade. There are also plenty of aliens to bargain with but be careful; some are more honest than others. If you can keep your insurance policy intact, get some good deals for your wares, and stay away from the interplanetary police for long enough, we'll make a businessman of you yet. The gameplay is excellent, though it will take some getting used to, but make sure you don't offer to sell any salami to the aliens.

PSYCHO HOPPER

What is all this about hopping? But this is a bouncy offering with a difference. Sitting astride your trusty rubber steed, your task in the world of dreams is to bubble your way through a fantasy castle collecting valuables in a desperate bid to find your way home. Getting used to the bouncebubble is tricky at first, and you certainly can't afford to hang around. As each second ticks by, the membrane of your bubble is being dissolved by the poisoned gas inside. Sit tight and blow away the baddies as they launch themselves at you. This is one ride you are going to enjoy.



Football mad

STRIKER

We're football crazy, we're football mad. Yes, it's another footie game, but this time it is your own career you have to worry about. How's that niggling ankle injury? Will you be picked for the squad on Saturday? It's a funny old game. Striker has some nice points, such as the weekly pep talks from the manager and the chance to see if any other clubs are chasing your talents. Playing one of the league matches is a bit of a letdown, though, as the only action you see is the opponent's goalie getting cold, unless of course, you get a chance of scoring yourself. A bit dull really.



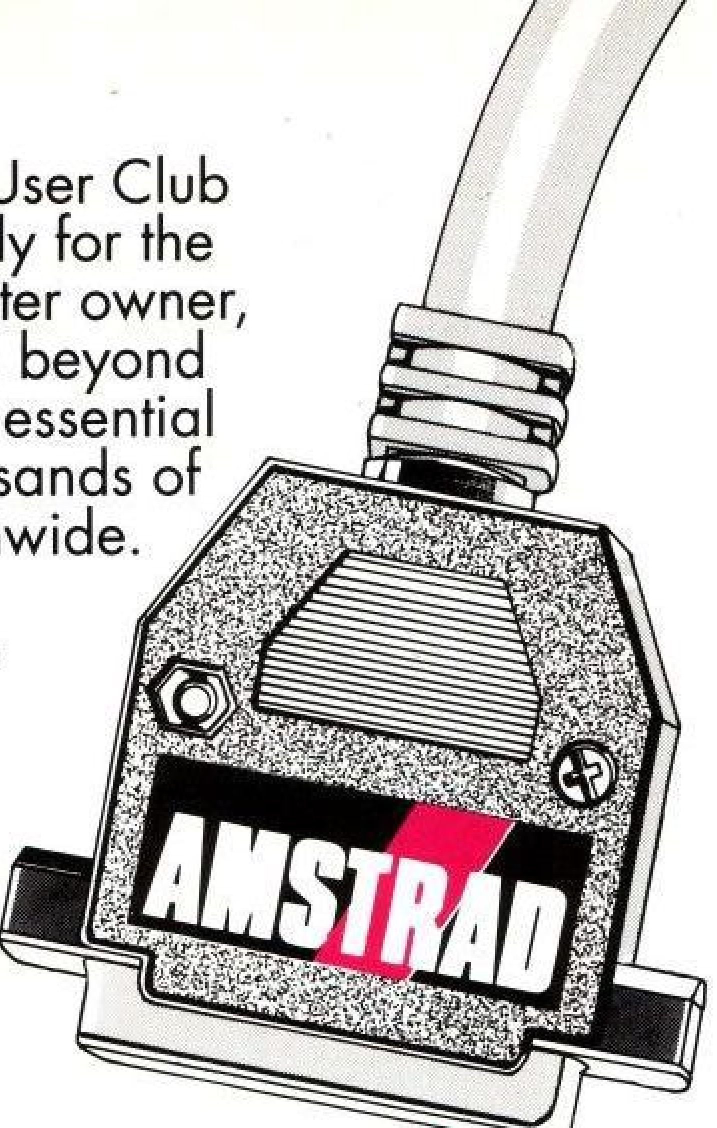
Bounce bonanza

ROUND-UP

NAME	FROM	PRICE	RATING
Superleague	Players Premier	£2.99	68%
Hopping Mad	Encore	£2.99	76%
Psycho Hopper	Mastertronic	£2.99	82%
Enterprise	Mastertronic	£2.99	80%
Striker	Cult	£2.99	60%

The Amstrad User Club caters exclusively for the Amstrad computer owner, and has proved beyond doubt to be the essential add-on for thousands of members nationwide.

We have the widest range of software and equipment available in the UK, all generously discounted for members,



You will also receive your choice of quality free gift and 'Welcome Pack' as soon as you join and much more besides! User Club Membership costs just £27.95 a year.

For further details and our full colour brochure simply return the FREEPOST coupon (no stamp required) or ring 091 510 8787.

THE ESSENTIAL ADD ON



with a 24 hour order service, technical hotline support, monthly club newsletters and price listings and 12 issues of the official Amstrad magazine, "Amstrad Computer User" worth £17.40.

Please send me Membership details of the Amstrad User Club.
I am resident in the U.K.
Name ....
Address ....
....
.... Postcode ....
Day Phone Number ....
Machine Type
....

AMSTRAD

Send to:

AMSTRAD USER CLUB, FREEPOST, Sunderland SR11BR.

ACU/SY/6

Looping the loop

Time to start pushing and jumping in Aunty John's action-packed machine code series.



Last month, we finished off by looking at an example of decision making in machine code. In Basic, this program might look like:

```
10 IF PEEK (&90000) = 10 THEN
GOTO 100
20 IF PEEK (&9000) = 11 THEN
GOTO 150
30 POKE 9001,0
40 STOP
100 POKE &9001,42
110 STOP
150 POKE &9001,67
160 STOP
```

Not a very exciting program, I agree, but it proves a point.

Slightly – but not much – more interesting is the prospect of allowing the program to loop back on itself. Such a program is shown below:

```
LDA 1,10
LOOP: NOP
DEC A
CPO
JR Z.LOOP
JR STOP
```

It's short, succinct and useless. At least it introduces a new instruction to us: NOP, or No-OPeration. Guess what it DOES? That's right – nothing. Believe it or not, NOP (code &00 – yes, zero) can sometimes be useful, so I'm reliably informed.

The program sets A up to be a counter, and then subtracts one from it repeatedly until it is equal to zero. Our first loop.

This is our first dealing with any proper programs – programs that make decisions and go places. The sort of program that would do well in business. The sort of program that you

wouldn't like to introduce your girlfriend to in case she fancied it more than you.

The machine code numbers for jumps are all very interesting, but if you use them you'll need to work out the relative jump distances yourself. This is a soul-destroying task and there is no reason why anyone should do it these days – assemblers are easy to come across.

Now for something good, something that provides scope for lots of silly mental images and almost explains a great fundamental of machine code – how to stop it from crashing at the end. Viewers in Northern Ireland will have



their own programme.

Here is a problem for you. What do you do when you run out of registers? Say you are using the registers in their paired up, two byte, 16 bit form. And say that you need to store another number, but you have no more registers to store it in. Bit of a bummer, eh? You could take each single byte register in turn and store it in a memory location, but that seems too much effort. There must be a better way.

Indeed there is a better way – it's called a stack. It is such a fundamental part of computer programming that entire books have been written about stacks (I know, I had to read them at university – they are the most boring books ever published). So what are stacks? And how are they attached to the back of the computer? Do they connect to the cassette interface? What colour are they? Do they have flashy lights on them?

Normally stacks are explained using analogies with paper plates or playing cards. I don't know why; they just are. I prefer to explain it using Pink Floyd albums.

Take your collection of Pink Floyd albums, and carry them into the kitchen to the kitchen table. The kitchen table is going to be the computer memory, where we can store the albums. Now you feel that your arms are getting tired holding all these albums, so you put Dark Side of the Moon on the table. You have PUSHed the album onto the stack. Then you put Wish You Were Here on top of it. You have PUSHed another object onto the stack. Suddenly you feel a great desire to listen to Money which is on Dark Side of the Moon as you well know. So you lift Wish You Were Here – POP it off the stack – and then pick up Dark Side of the Moon – POP it as well.

That's what a stack is – an ordered pile. It's called a 'first in last out' stack because that is what happens – the first item put in is the last item to be taken out. The golden rule is that it is impossible to touch any object other than the one on the very top of the stack. You can put more objects on top of it but you can't touch any underneath it without moving the top one first.

So what does this have to do with machine code? Quite a lot actually. The instructions PUSH and POP will work with the register pairs to store and retrieve items from a stack. For example:

```
PUSH HL
;do something else
POP HL
```

will always ensure that the initial value of HL is preserved.

Here is a tricky problem. Look at it carefully, and see if you can guess what will happen. Look very carefully – there is a trick.

```
PUSH BC
PUSH DE
;do something
POP BC
POP DE
```

Looks ok does it? Preserves BC and DE does it? Wrong! It doesn't! It actually swaps the initial values of BC and DE. Think of the stack – first BC is put on it, then DE. After the 'do something' bit a value is POPed and put into BC; this value is the last value to have been placed on the stack, that of DE. Then another value is POPed and placed into DE – the value that was in BC.

The important thing to remember is that the registers used in the POP command only determine where the value on the top of the stack is to be moved to. Once the values are on the stack, where they came from is irrelevant. Be very careful with stacks and double check the order of PUSHes and POPs. You MUST also remove all the values you have PUSHed before your program or routine ends. This is vital – even if you don't think you need the values again, you absolutely must POP them off the stack. The next chapter has the reason why.

The more cynical of you might wonder what would happen if you were to POP a value of the stack before you had PUSHed one up. The answer is garbage. The system would probably not crash (immediately that is) but the value returned would be one which you didn't really expect. (This is a plug for the next chapter – get it or be forever in the dark). The even more cynical might wonder what would happen if you kept on PUSHing things onto the stack. Would the numbers pile up inside and wear out through cracks in the keyboard? Sorry to disappoint you. If you did stack over twenty thousand numbers then all the spare REM would be used up and the computer would crash.



Not really recommended.

To summarise, stacks are like piles of Pink Floyd albums – very desirable. The Z80 allows you to store the numbers on a stack, as long as you promise to take them off when you finish. There were hardly any listings and next to no jokes. Bit dull really.

O.J. SOFTWARE

FAST FRIENDLY SERVICE

ADVENTURE	Cass	Disc
Scapeghost	£11.95	£15.95
Bards Tale	£2.95	£6.95
Tolkein Trilogy	£10.95	£14.95
Pirates (6128) Only		£15.95
Bards Tale Hint Book		£4.50
Heroes of Lance	£8.50	£15.95
Lancelot	£11.95	£15.95
Countdown to Doom		£10.95
Return to Doom		£10.95
Avon & Murdac		£11.95
Ingrids Back	£11.95	£15.95
Tolkien Trilogy	£10.95	£14.95

ARCADE		
P47 Thunderbolt	£8.50	£11.95
Ghostbusters II	£8.50	£11.95
Fighting Soccer	£8.50	£11.95
Batman The Movie	£8.50	£11.95
Scramble Spirits	£8.50	£11.95
After The War	£8.50	£11.95
Oper Thunderbolt	£8.50	£11.95
Untouchables	£8.50	£11.95
Wild Streets	£8.50	£11.95
Crazy Cars II	£8.50	£11.95
Robocop	£8.50	£11.95
Shinobi	£8.50	£11.95
Space Harrier	£8.50	£11.95
Powerdrift	£8.50	£11.95
Dr Dooms Revenge	£8.50	£11.95
Fiendish Freedy	£8.50	£11.95
Pacmania	£8.50	£11.95
Pacland	£8.50	£11.95
Ghouls & Ghosts	£8.50	£11.95
Ninja Warrior	£8.50	£11.95
Myth	£8.50	£11.95
Continental Circus	£8.50	£11.95
Chase HQ	£8.50	£11.95
Cabal	£8.50	£11.95
Super Wonderboy	£8.50	£11.95
Test Drive II	£8.50	£13.95
Xenon	£8.50	£11.95
Rainbow Islands	£8.50	£11.95

JOYSTICKS	
Cheetah 125+	£7.95
Ram Delta	£9.95
Konix Speedking	£10.95
Konix Navigator	£12.95
Cheetah Mach 1	£10.95
Pro 5000 Clear	£14.95
Pro 5000 Extra	£16.95
Starprobe	£13.95
Quickshot II Turbo	£10.95

COMPILATIONS		
Mega Mix	£11.95	
Thrill Time Gold1	£8.50	
Thrill Time Gold2	£8.50	
Thrill Time Plat	£10.95	£15.95
100% Dynamite	£11.95	
Coin-Op Hits	£11.95	£15.95
Leaderbd's Par 3	£11.95	£15.95
InCrowd	£11.95	
Flight Ace	£10.95	£14.95
Supreme Challenge	£10.95	£13.95
Joystick Thunder	£10.95	£14.95
Magnificent 7		£14.95
House Mix	£8.50	£11.95
Winners	£11.95	£15.95
Epyx Action	£11.95	£15.95
Thrill Time Gold 3	£8.50	
Starwars Triology	£10.95	£15.95
Soccer Spectac	£10.95	£13.95
The Biz	£11.95	
Story So Far 2	£10.95	£11.95
Game Set Match II	£10.95	£14.95
Heat Wave	£10.95	£14.95
Special Action	£10.95	£14.95

EDUCATIONAL	Cass	Disc
Funschool 2–5	£5.50	£7.50
Funschool 5–8	£5.50	£7.50
Funschool 8–12	£5.50	£7.50
Funschool II UN6	£8.50	£10.95
Funschool II 6–8	£8.50	£10.95
Funschool II OV8	£8.50	£10.95
Happy Letters 3–6	£8.50	£11.95
Happy Numbers 3–6	£8.50	£11.95
Happy Writing 3–6	£8.50	£11.95
Wordhang 5+	£8.50	£11.95
Timeman I 4–9	£8.50	£11.95
Timeman II 4–9	£8.50	£11.95
Map Rally 7+	£8.50	£11.95
Animal/Veg/Min 7+	£8.50	£11.95
World Wise 7+	£8.50	£11.95
Physics GCSE	£11.95	£15.95
Chemistry GCSE	£11.95	£15.95
Play & Read	£16.95	£21.95
Here & There Mr Men	£9.95	
Caesers Travels	£9.95	
Early Words	£8.95	£13.95
Early Maths	£8.95	£13.95
Primary Maths 5–14	£24.95	£24.95
Micromaths 8+	£24.95	£24.95
Mega Maths 15+	£24.95	£24.95
Micro English	£24.95	£24.95
Grannys Garden (6128)		£16.95
Giant Killer Maths ADV		£11.95
Three Bears		£12.95
Magic Maths 4–8	£8.95	£12.95
Maths Mania 8–12	£8.95	£12.95
Maxi Maths 9–14	£8.95	£12.95
Better Maths 12–16	£8.95	£12.95
Better Spelling 9+	£8.95	£12.95
Biology I 12–16	£8.95	£12.95
Physics I 12–16	£8.95	£12.95
Chemistry I 12–16	£8.95	£12.95
Geog Quiz GB + IR	£8.95	£12.95
Weather/Climate	£8.95	£12.95
French Mistress	£13.95	£16.95
Spanish Tutor	£13.95	£16.95
German Master	£13.95	£16.95
Italian Tutor	£13.95	£16.95
Answer Back Jnr	£8.50	£11.95

STRATEGY/SIMULATION		
Pictionary	£11.95	£15.95
Colossus 4 Bridge	£9.95	£11.95
Colossus 4 Chess	£8.50	£11.95
Scrabble DeLuxe 128K		£12.95
Mindsreachers		£15.95
Monopoly	£8.50	£12.95
Scrabble & Cluedo	£15.95	£15.95
Leaderboard Par3	£11.95	£15.95
Jack Nicklaus Golf	£8.50	£13.95
Carrier Command 6128		£14.95
Chuck Yeagers Aft	£7.95	£11.95
F15 Strike Eagle	£8.50	£11.95
Footballer Year II	£8.50	£11.95
Gunship	£11.95	£15.95
Silent Service	£8.50	£11.95
Desert Rats		£11.95
Football DI II Disc		£15.95
Football Manag II	£8.50	£11.95
Kick Off	£8.50	£11.95
Yes Chancellor Disc		£11.95
Arnhem	£8.50	£11.95
Saint & Greavsie	£8.50	£11.95
Vulcan	£8.50	£11.95
Bob's Full House	£6.95	
Cricket Master	£8.50	
Quarterback	£8.50	£11.95
Ancient Battles	£11.95	£11.95
Treble Champions	£8.50	£11.95
Emlyn Hughes Socc	£8.50	£11.95
Gazza Super Soccer	£8.50	£11.95

BUS/UTILITIES	Disc
AMX Mouse & Art	£62.95
AMX Mouse & Stop Press	£71.95
AMX Stop Press	£39.95
AMX Extra Extra	£20.95
Proext (ROM + £8.00)	£21.95
Protext CPM + Version	£50.95
Prospell (ROM + £8.00)	£20.95
Promerge (ROM + £8.00)	£20.95
Maxam (ROM + £8.00)	£21.95
Utopia ROM	£24.95
Tasword 464D/6128	£24.95
Taspell	£15.95
Tasign 6128&PCW	£24.95
Tascopy	£11.95
Tasprint	£11.95
Tasdiary	£11.95
Microdesign	£20.95
Microdesign Extra	£10.95
Supercalc II 6128&PCW	£59.95
Advanced Art Studio	£19.95
Art Studio	£14.95
Mastercalc 128	£27.95
Masterfile III	£29.95
Money Manager (+ PCW)	£24.95
Mini Office II	£15.95
Plan – It	£15.95
Crash Course Typ Tutor	£20.95
Two Fingers Conversion	£20.95
Qualitas + (New)	£13.95

BUDGET	Cass
All £1.99 Budget	£1.80
All £2.99 Budget	£2.75
Fantasy World Dizzy	£2.75
Matchday	£2.75
Chuckie Egg	£2.75
Chuckie Egg II	£2.75
Paperboy	£2.75
Wonderboy	£2.75

ACCESSORIES	
Multiface II+	£46.95
3.5" Drive Romdos	£109.95
3.5" Dr Rodos/Romdos	£119.95
Ribbon Refresh	£7.95
AMX Mouse & Stop Press	£71.95
Star LC10 Inc cable	£179.95
LC10 Ribbons £3.75	£7.00
Rombo Rombox (8 Roms)	£31.95
KDS 8 Bit Printer Port	£18.95
Cass Head Alignment Kit	£7.50
6128 Keyboard Ext Lead	£7.95
464 Keyboard Ext Leads	£6.95
Amstrad MP2 Modulator	£28.95
Amstrad DDI Drive	£159.95
Citizen 120D Printer	£149.95
FD1 2nd Drive (3")	£99.95
FD1 Cable for 6128	£7.95
3" Disc Drive Cleaner	£5.95
AMS30L Disc Box	£12.95
Disc Box 40+	£9.95
Monitor Stand	£15.95
464/664 64K Rampak	£44.95
Printer Cable 1mtr	£8.95
Ribbon DMP 2/2160/3160	£3.75
2 For .... £7.00 .... 5 For	£16.25
Covers 464/6128 Col/M	£7.50
Cover DMP 2/2160	£4.50
Seal & Type 464/6128	£8.95
Amsoft/Maxell Discs	£2.65
5 For .... £12.50 .... 10 For	£23.95
Mousemat	£4.95
Joystick Splitter	£7.95
Printer Cable 2mtr	£10.95
664/6128 Cass Lead	£3.50
Cassette Recorder	£18.95
Cassette Recorder & Lead	£21.95

NEW GAMES ARE AVAILABLE ON DAY OF RELEASE: PLEASE PHONE FOR AVAILABILITY
Prices include Post & Packing in UK. Please send Cheques/PO's to:

O.J. SOFTWARE
273 MOSSY LEA ROAD, WRIGHTINGTON, WIGAN, LANCS WN6 9RN

MOST ORDERS ARE DESPATCHED BY RETURN
(OUT OF STOCK ITEMS USUALLY WITHIN ONE WEEK)
Write or phone (0257) 421915 for FREE LIST and LATEST RELEASES
OVERSEAS ORDERS: SOFTWARE ITEMS COSTING OVER £10 EACH
POST FREE, OTHERS ADD £1.00 EACH
⋆ SPECIAL OFFER ALL SOFTWARE ORDERS OVER £30 FREE CALCULATOR ⋆
Order by Access or Visa 24 hrs Answerphone

EXPAND YOUR AMSTRAD

● SERIAL CARD

Dual channel RS232 Serial Interface. Uses Amstrad recommended addresses with full hand shaking. Software available on disc or ROM.

Serial Card (41-03205) **£34.44**
Software On disc (41-03207) **£10.81**
Software On ROM (41-03208) **£10.81**

● PARALLEL CARD

Twin 8-bit input/output card. Full 8-bit centronics port and 8-bit input/output port. Support software available on disc or ROM.

Parallel Card (41-03201) **£22.94**
Software On Disc (41-03203) **£8.74**
Software On ROM (41-03204) **£8.74**

● ROM CARD

ROM expansion card, takes upto 4 ROMs, further cards may be daisy chained together to provide up to 16 locations.

ROM Card (41-03200) **£22.95**

Cards are built on Half Eurocard size PCBs, with 50 way edge connectors, through board bus and are supplied with very comprehensive manuals.

Prices include V.A.T. Please add £1.00 for p.p.

Cirkit

Cirkit Distribution Limited
Park Lane, Broxbourne, Herts EN10 7NQ
Tel: Sales (0992) 444111; Enquiries: (0992) 441306

SD MICROSYSTEMS

THE CPC BUSINESS SOFTWARE SPECIALISTS

GENERAL LEDGER 6128 .... £29.95
Simplified book-keeping system for small firms/clubs or self-employed. Handles receipts, payments, VAT plus monthly standing orders and bank/cash. Produces useful reports including profit/loss A/C trial balance and nett worth. (v.2.2)

STOCK ACCOUNTING £39.95
Integrated stock control/invoicing package for the CPC 6128. Produces invoices from a built-in price list with up to 750 items.

Cheques/P.O.s or SAE for catalogue. PCW OWNERS! Ask for details of our new Accounts software. (State computer/printer).
*Quality CF2 3' disks .... **£19.95 for 10***

PAGE PUBLISHER £24.95
An affordable and easy-to-use DTP package for all 128K CPCs! Ideal for creating letterheads, logos, posters and all types of leaflet etc. Several styles/sizes of text with word-wrap and justification. Multiple columns. Powerful drawing/design commands by Joystick/Keyboard. A4 and A5 print formats on Epson-compatibles with Quad-density graphics. NEW! 'EXTRAS' disc with more fonts/clip art £10. Both for £29.95!

HOME EXECUTIVE SUITE £19.95
Personal Accounts, Card Filer, Shopper, Diary/Calendar page makers. Prints on A4 or cont. organiser stationary (£8.95 pack).

SD Microsystems (Dept ACU)
P.O. Box 24, Hitchin, Herts.
☎ (0462) 422897

SENIOR SOFTWARE

(Dept ACU), 30 The Poplars, Womersley Road, Knottingley
West Yorkshire WF11 0DE. Telephone: (0977) 678576

	Cass	Disc
Robocop	7.25	10.70
Shinobi	7.25	10.70
Jack Nicklaus Golf	7.25	11.99
The Biz	9.99	
Wild Streets	7.25	
Dr Dooms Revenge	7.25	
Space Harrier 2	7.25	10.70
Mega Mix	9.99	12.99
Ghostbusters 2	7.25	10.70
Ninja Warriors	7.25	10.70
Operation Thunderbolt	7.25	10.70
Chase H.Q.	7.25	10.70

	Cass	Disc
Batman (The Movie)	7.25	10.70
Beverley Hills Cop	7.25	10.70
P47 Thunderbolt	7.25	
Joystick Thunder	9.70	13.70
Snoopy	7.25	
Football Manager 2	4.99	9.99
Garfields Winter Tale	7.25	
Rainbow Islands	7.25	10.70
Captain Blood	2.99	
Prohibition	2.99	
Super League	2.99	
Classic Punter	2.99	
Scramble Spirits	7.25	10.70
Little Puff	2.99	

Send SAE for full list. Any two at £7.25 for £14.00 Any two at £2.99 for £4.95
Please make cheques/P.O. payable to SENIOR SOFTWARE.
UK ONLY PLEASE ALL PRICES INCLUDE P&P.

STRATEGY SOFTWARE
Strategy games for the Amstrad CPC

BATTLE OF THE BULGE – is a simulation of the last major offensive in the west when they attacked the allied forces. The options are 1 or 2 players with over 140 units involved. The types of units are corps, infantry, motorised infantry, armoured, anti-tank, artillery and cities. The size of these are divisions and Regiments and have ratings for strength, quality, provisions, fuel and moves. There are also different weather conditions, supply and air phase, save game and a detailed manual. All of this is set on a scrolling map which has different terrain. Map size is 40 x 40.

OPERATION BARBAROSSA – simulation of the war between Germany and the Soviet Union which started on June 22, 1941. There are four different armies which are German, Rumanian, Finnish which represents the Axis and against these are the Soviets. Options are 1 or 2 players. There are over 130 units. Unit types are infantry, motorised infantry, corps, armoured and cities. Ratings for strength, quality, supplies, fuel. Each turn represents one week with four seasons, summer, autumn, winter, spring. Air phase, Supply phase, and Winter phase. Save game. Detailed manual. All of this is set on a scrolling map which is 43 x 47 and covers the Eastern Front from Warsaw to Stalingrad and from Helsinki to Bucharest. Terrain features are sea, rivers, mountains, marshes, and cities.

CANNAE 216BC – is a battle between the Carthaginians and Romans in Southern Italy in August 216BC. Options are 1 or 2 players with 30 units involved. Types of units are light infantry, heavy infantry, light cavalry and heavy cavalry. These have different ratings for strength, quality, morale, fatigue and moves. Each turn represents one hour. All of this is set on a scrolling map which has different types of terrain and is 25 x 27. Also save game option and a detailed manual.

THE FINAL CONFLICT – conflict between Nato and the Warsaw pact in Europe.

SOCCER 6128 – football strategy game, manage any team in the four divisions.

KURSK THE CLASH OF ARMOUR – WW2 battle between the German and Soviet armies.

SOFTWARE HIRE CLUB – we hire out games. Send large SAE for details.

Title	Disk	Tape	
BATTLE OF THE BULGE	£8.00	£7.00	
OPERATION BARBAROSSA	£8.00	£7.00	
CANNAE 216BC	£8.00	£7.00	Disk not available
THE FINAL CONFLICT	£8.00	£7.00	for 464 disk drive
SOCCER 6128 For 6128 only	£8.00		
KURSK THE CLASH ARMOUR	£8.00	£7.00	

State machine type. Add 60p outside UK or £1.60 outside Europe per game.
Cheques or postal orders payable to STRATEGY SOFTWARE
Send to – STRATEGY SOFTWARE (ACU), 32 Albert Street, Seaham, Co Durham SR7 7LJ

VIEW

View : Stop Press or Crammed Pages can be Viewed : combined Altered and Swapped.

Five high speed 7 pin printer modes. High Resolution, High Resolution Condensed, Draft, Draft Condensed, & Proofing.

Cram : Reduces disc space required by compacting single or combined Pages

Build : Reconstructs Crammed Stop Press pages, for editing by Stop Press. Pages may be Built as single pages, or as combined pairs. This feature enables you to extend pages.

Queue : Up to 8 Crammed pages to Printer at a time.

This Ad. was set using Stop Press and X-Press.

PROFESSIONAL PRINTING
X-PRESS
S-© 1989 MEDWAY - KING ©

MK
Medway King

X-Press Version 1.3
£ 19-95
X-Press Version 2.0
Only Available from
Medway / King
£ 24-95

Version 2.0 – Now has extra pages & utilities. X-Press 2.0 now offers eight page frames from Extra Extra by Database. Build the one you want and start work on a ready framed Page.
X-Frames – Makes Combined Framed Pages

Modecut – Takes modes 1 or 2 CPC screens and makes four Cutouts for Stop Press. The four pens used in mode 1 have four shade patterns from white to black. Now print your favourite Colour Loading Pics with X-Press's fabulously fast and accurate printer modes.

Page Ruler – A Crammed Combined Page with a ruler of Stop Press Page pixels 0 - 911 across and 0 - 709 down. Print it and you get a set of page rulers to fit your copy or Cutouts.

StarSC10 – Will remove extra line feeds when running X-Press.

LARGE FONTS – (Separate Disc) Crammed Pages of LARGE clean FONTS. Build them and the characters can be made into Cutouts for display fonts on posters etc.
£9-95 (Requires X-Press).

MUSIC FONT – (Separate Disc) Manuscript Combined Pages. Keyboard Location Chart. + Fonts and samples. £9-95 (Requires X-Press).

Upgrades to X-Press Version 2.0 - £4-00.
Includes post & packing.
Upgrades to X-Press Version 1.3 - £2-00.
MEDWAY KING (Ref A.U)
77 Maldon Rd. Bitterne Southampton SO2 7AF

MAKE YOUR AMSTRAD EARN!

Yes making money with your Amstrad becomes incidental when you know how. Your micro is, if only you knew it, a gold mine. The size and make is irrelevant. Make the initial effort **NOW** by starting your own.

HOME BASED BUSINESS.

This may be the most important move you will ever make!

REMEMBER: You'll never get rich by digging someone else's "ditch". Anyone in the country, including YOU, can become very rich in a relatively short period of time just by doing a few basic things! It's more rewarding than playing games. The benefits are many and varied. Full or part time. For FREE details send S.A.E. to:

HOME BASED BUSINESS
31 PILTON PLACE (ACU 20)
KING AND QUEEN STREET
WALWORTH, LONDON SE17 1DR

ONLY POOLS AND HORSES

FOOTBALL BOXFORM £14.95 (+£2 FOR 3" disc)
The only genuine form program for British football now incorporates SOCCEROO, a programe specially written for AUSTRALIAN POOLS.
FOOTBALL BOXFORM is not a gimmicky plaything but a serious statistical analysis of football form. Its sole objective is to improve the chances of winning on the pools or fixed odds and the results speak for themselves. THE PROGRAM HAS FORECAST 50% MORE DRAWS THAN WOULD BE EXPECTED BY PURE CHANCE.
Homes, aways and draws are show in order of merit and true odds given for every match. Merit tables show at a glance the teams currently in form and those having a lean spell. Covers League and non-League clubs.
"won £930 on the first week using FOOTBALL BOXFORM" D.D. Devon. "The program is nicely presented and easily used and updated . . . will undoubtedly prove extremely useful and profitable" Chic Computer Club

POOLS PLANNER £14.95 (+£2 FOR 3" disc)
The perm book on a computer. Gives full details of 369 entries ranging from 9 to 73960 lines and covering from 12 to 56 selections. Enter the amount you wish to stake and several examples are listed. No problem with checking . . . simply enter the results of your selections and the best lines are given almost immediately. Based on Lit-Blocks they are easily entered on the coupon and all are accepted by the pools firms.

RACING BOXFORM & HANDICAP WINNER £14.95 (+£2 FOR 3" disc)
Two programs for the price of one. Easy to use and they never go out of date. All you need is a few minutes with a daily paper. **BOXFORM** weighs up a race by considering the many facets of form. Easily amended to suit the user's ideas. **HANDICAP WINNER** shows the value for money bets. Over 1,000 winners in 1989 handicaps at 28/1, 25/1, 20/1, 16/1, 15/1 . . . etc, etc.
"I received the tape last week and already it has paid for itself" A.G. Manchester.
SPECIAL OFFERS. Any 2 of the above £24.95 or all 3 £34.90 (+£4 for 3" discs in either case). Both offers include **FREE** program to work out almost any bet. So good it's used by bookies.

RACING TOOL KIT (£49.95 tape or disc)
A package of 7 programs for the racing enthusiast. BOXFORM and HANDICAP WINNER plus programs to produce ratings and time figures, update private handicaps for form your own, keep records, work out almost any bet, etc.
"Bought your suite of programs – found them to be absolutely marvellous – quite superb" R.E.W. Wolverhampton.
Why pay inflated prices? **BOXoft CLEVER** and get the **BEST** available on tape or disc for SPECTRUM, CMD C64-128, AMS CPC'S, BBC B. Price for 5 ¼" discs same as for tapes.

BOXOFT (ACU), 65 Allans Meadow,
Neston, South Wirral L64 9SQ
Credit card holders may phone 051-336 2668 (24 hrs)

VISA

JACKSON COMPUTERS LIMITED

JOIN OUR DISCOUNT CLUB!

Life membership for £8.50

Software/Hardware Discounts of 5–20% off RRP.
All AMSTRAD and other leading makes of software available.
Complete computer system, printers, modems, cables.

Amstrad CPC464 with colour monitor £287.50
Amstrad CPC6128 with colour monitor £389.90
PCW8256/512..........................£424.35/£539.35
Amstrad PCW 9512 ....£557.75
Amstrad PC 1640 ECD ....Ring for details

PPC portable computers in stock and also PC2000 range. Ring for details.

All prices include VAT.
Also free Life Membership when you purchase any CPC or PCW AMSTRAD computer. Tel: Between 9am-5pm 081-655 1610

Send for full price list and membership form to:
25 Spring Lane, Woodside, South Norwood
London SE25 4SP

ARC

EDUCATIONAL SOFTWARE SPECIALISTS

PRE-SCHOOL – PRIMARY – JUNIOR

Devised by experienced teachers
Tested in Classroom and Home
Parent/Teacher notes supplied with all sets

WIDE CHOICE OF PROGRAMS FOR AMSTRAD 464, 664, 6128, PCW, PC1512, ATARI ST, SPECTRUM +3 +2
CASSETTE £10.50
DISC £13.00 PER SET
(each set has 5 or 6 programs)
Please send SAE for lists, state model and child's age

ARC (ACU 6), 51 Coniston Crescent, Humberston, South Humberside DN36 4BA. Tel. (0472) 812226

SALE NOW ON
3" CF2 DISCS FROM £1.70 each DELIVERED
(IN VAT – NOTHING MORE TO PAY)*

Quantity	5	10	20	50	100
Un branded	£9.95	£17.99	£35.50	£87.50	£170.00
Maxell Panasonic CF2 3"	£10.95	£18.95	£37.75	£94.00	£185.00
Amsoft Branded 3"	£11.95	£21.95	£43.90	£109.00	£218.00
Rigid Plastic Library Cases	£2.50	£4.95	£9.45	£21.95	£39.95
Individually cased CF2	£13.95	£22.45	£44.00	£106.95	£209.00

All Discs Guaranteed

3" Disc Drive Head Cleaning Kit £4.95   Quality Lockable Disc Box (holds 30 CF2) £7.95

DON'T THROW AWAY YOUR USED FABRIC PRINTER RIBBONS – RE-INK THEM FOR 95p EACH or £1.75 per 2*

DISC FORMAT TRANSLATION SERVICE
3½"◄►3"◄►5¼" CP/M◄►MS-DOS◄►APPLE/MAC, ETC. ONLY £5.95/DISC*

LASER PRINTING FROM 25p PER PAGE   COMPLETE DESKTOP PUBLISHING SERVICE

PCW-World User Group
COTSWOLD HOUSE, CRADLEY HEATH, WARLEY
WEST MIDLANDS B64 7NF
Dept ACU
CALL 0384 66269 ANYTIME
VISA
*For orders under £50 add £1.50 post & packing. E.&O.E.



The price is right

More hackery-pokery

from Vax

They've dragged me out of the coffin again folks! Yes, another Hairy Hacker's Haunt has appeared to assail the senses. The wee delay since the last one is to do with a new addition to the Hackery: A little girl called Tammy. Still, this gives me plenty of sleepless nights to do the column in, doesn't it?

You don't want explanations, you want code! So here's some of the backlog that's built up from just one guy over the past few months:

Andrew Price, the busy lad, has come up with more pokes than you can shake a joystick at. Furiously shaking my joystick, I've transcribed a few pokettes for your perusal, starting with the little ones, and building my way up to the biggies.That way, you won't fall to sleep as you near the end.

Flying a chopper is a tricky art, and usually the last thing you want someone to do is give you a poke while you're trying to fly the damn thing and shoot down the dogless commie hordes at the same time. So, here is a poke that you must type in BEFORE you run the game:

```
1' Turbo Chopper Simulator
2' by Andre Price
3' Feb 1990
4'
10 MEMORY &3A42:LOAD"
20 FOR a=&BE00 to &BE28
30 READ b$:b=VAL("&"+b$)
40 c=c+b:POKE a,b:NEXT
50 IF c<>&10C3 THEN 130
55 CALL &BE00
60 DATA 2A, 38, BD, E5, AC, E1
70 DATA 22,27,BE,AD,21,37
80 DATA BD,3E,C3,77,23,3E
90 DATA 22,77,3E,BE,23,77
100 DATA 21,40,00,E3,11,00
110 DATA BB,C3,4A,3Am,AF,32
120 DATA DD,7D,CF,00,00
130 PRINT "DATA error"
```

I remember Exolon, fond memories indeed of days spent at Amstrad HQ with 2,000 quids worth of lab equipment, using it to poke Exolon senseless, and add extra dangly bits to the sprites. Well Andy Price has done it now, using his trusty maxam, and you can all share the results as long as you have the 4 Smash Hits version. No dangly bits though!

```
1 ' EXOLON – 4 Smash Hits
2 ' (c) Andre Price 1990
3 ' Amstrad Computer User
4 ' Jan 1990
5 '
10 DATA 21, 19,BE,22
20 DATA 53,41,C3,00
30 DATA 40,3E,00,32
40 DATA 7A,1F,32,59
50 DATA 11,32,25,2A
60 DATA 32,25,2B,C3
70 DATA 00l01,00,06
80 DATA 18,26
90 FOR a=&BE10 to &BE29
100 READ b$:POKE a, VAL ("&"+b$)
110 NEXT:MEMORY &3FFF
120 LOAD "loader", &4000
130 FOR A=0 TO 3:READ B
140 INK A,B:NEXT
150 MODE 1:CALL &B10
```

Mutant Fortress? Never heard of it squire. Isn't that where Mutant Teenage Hero Turtles live? Hero Mutant Turtled Teenagers? Murtled Hero Tuneage Teetants? Something like that, anyway, my daughter Kate would know. Who cares, Andy Price says it's a good pokette, so it's gotta be. Stick this in your Amstrad and play with it:

```
1 ' Mutant Fortress tape
2 ' by Andrew Price
3 ' Jan 1990
4 '
10 FOR ad=&BE00 to &BE20
20 READ a$:a=VAL ("&"+a$)
30 c=c+aPPOKE ad,a:NEXT
40 MEMORY &2FFF
50 IF c<>&DA0 GOTO 89
60 LOAD "":CALL & BE09
80 DATA c4,14,AC,AF
80 DATA 32,C6,05,FB
```

```
82 DATA C9,3E,8F,32
83 DATA 7F,41,3E,B3
84 DATA 32,CC,41,21
85 DATA 64,46,36,92
86 DATA 2B,36,83,2B
87 DATA 36,DF,C3,05
88 DATA 40,00,00,00
89 PRINT "Data error!"
```

Well, this one is a little earlier than the previous lot, and quite a bit longer to boot. It's what Andy did to Outrun back in October. I can't find the tape, and my mind can't quite reach that far back, so could someone remind me what it did?

```
1 ' Outrun
2 ' by Andrew Price
3 ' October 89
4 '
10 DATA CF,CA,8A,00
20 DATA 00,01,00,00
30 DATA 11, AB,BE,1A
40 DATA B7,CA,17,BE
50 DATA CD,5A,BB,13
60 DATA C3,0B,BE,21
70 DATA 00,C0,11,00
80 DATA 70,06,00,CD
90 DATA 77,BC,21,18
100 DATA 32,CD,83,BC
110 DATA CD,7A,BC,21
120 DATA 0E,BC,36,C3
130 DATA 23,36,4D,23
140 DATA 36,BE,01,10
150 DATA F6,ED,49,AF
160 DATA A8,DD,21,5B
170 DATA AA,DD,22,CC
180 DATA BE,FD,21,7B
190 DATA AA,FD,22,CE
200DATA BE,ED,73,15
210 DATA 32m,DD,21,00
220 DATA 00,FD,21,00
230 DATA 00,C3,18,32
240 DATA 3E,00,CD,00
250 DATA BE,3A,03,BE
260 DATA 3C,32,03,BE
270 DATA FE,02,C0,21
280 DATA 5B,34,3E,67
290 DATA 77,23,3E,BE
300 DATA 77,C9,ED,5B
310 DATA 04,BE,DD,21
320 DATA 5B,AA,CD,EA
330 DATA A9,21,0A,AB
340 DATA 3E,7F,77,23
350 DATA 3E,7F,77,23
350 DATA 3E,BE,77,C3
360 DATA 85,AA,3E,37
370 DATA 32,74,03,3E
380 DATA 30,32,75,03
390 DATA AF,21,B0,20
400 DATA 77,23,77,23
410 DATA 77,32,26,21
420 DATA,ED,5B,04,BE
430 DATA C3,00,01,4F
440 DATA 75,74,72,75
450 DATA 6E,20,48,61
460 DATA 63,6B,20,62
470 DATA 79,20,41,6E
480 DATA 64,79,20,27
490 DATA 68,61,63,6B
500 DATA 27,20,50,72
510 DATA 69,63,65,00
520 DATA 00,00,00,00,
530 DATA AP
540 '
550 MEMORY &1FFF
560 MODE 2:chk=0:x=&BE00
570 READ a$
580 IF a$="AP" THEN 620
590 a=VAL ("&"+a$)
600 POKE x,a:x=x+1
610 chk=chk+a:GOTO 570
620 IF chk<>&5078 THEN 640
630 MODE 1:CALL %BE08
640 PRINT "DATA ERROR"
```

Another good blast from the past was Uridium (sniff! sniff! Who reminisced?), and Andy's next pokeykins means that you can now play it for longer!

```
1' URUDIUM+ – Smash Hits
2' ( c) Andrew Price 1990
3 ' Amstrad Computer User
4 ' Jan 1990
5 '
10 DATA 21,19,BE
20 DATA 22,4E,41
30 DATA C3,00,40
40 DATA AF,32,C2
50 DATA 5E,C3,16
60 DATA BE,00,20
70 DATA 26,24
80 MEMORY &3FFF
90 FOR a=BE10 TO &BE1F
100 READ b$:POKE a,VAL ("&"+b$)
110 NEXT:FOR a=0 TO 3
120 READ b:INK a,b:NEXT
130MEMORY&3FFF:LOAD"loader"
140 MODE 1:CALL &BE10
```

Roboflop has to be the most hacked game of 89/90. This little bijou-pokette gives you infinite energy on the tape version, cunningly wheeled round the speedlock loader. There are also some Multiface magic numbers at the start of the poke for those lucky folks with such machines. Just type in this little lot and run it, then stick in the Roboflop tape. You have fifteen seconds to comply...

```
10 ' Robocop poke – tape
20 ' by Andrew Price
30 ' Invulnerability
40 ' Multiface:
50 ' 3EF2,&C9 – immunity
60 ' 6F61,0 and
70 ' 6F74,0 – stop clock
80 DATA 21,17,BD,22,43
90 DATA BE,11,16,BD,3E
100 DATA C3,12,13,3E,18
110 DATA 12,13,3E,BE,12
120 DATA A7,C3,A5,99,D5
130 DATA 11,24,BE,ED,53
140 DATA 4F,A6,D1,C3,08
150 DATA A6,DD,21,B9,A8
160 DATA 11,AB,00,CD,48
170 DATA A8,D5,11,3A,BE
180 DATA ED,53,62,A9,D1
190 DATA C3,E3,A8,3E,C9
200 DATA 32,F2,3E,C3,66
210 DATA 3F,CF,00,00,00
220 DATA A.P
230 '
240MODE1:chk=0:MEMORY&98FF
250 FOR ad=&BE00 TO &BE44
260 READ a$:f=VAL ("&"+a$)
270 IF a$="A.P" THEN 290
280 chk=chk+f:POKE ad,f:NEXT
290 IF chk<>&1F52 THEN 320
300 PRINT"INSERT ROBOCOP"
310LOAD"ROBOCOP":CALL&BE00
320 PRINT "Data error!!!!"
```

This yur Predator pokelet is some really cunning stuff. It actually updates the disc to give you infinite ammo, energy or whatever. Now, Andy was sure enough of this one to send in his Predator disc for me to try it out on, but we take no responsibility for chewed master discs, OK? Try this, and don't forget to roll in the mud:

```
1 ' Predator disc doctor
2 ' By Andre Price
3 ' Amstrad Computer User
10 DATA 21,00,30,0E,86,1E,00,16,10
20 DATA DF,16,60,3E,00,32,C2,31,AF
30 DATA DF,19,60,C9,3C,C0,07,3F,C0
40 DATA 01,21,00,30,1E,00,0E,81,16
50 DATA 16,DF,16,60,3E,00,32,7C,31
60 DATA AF,DF,19,60,C9
70 FOR ad=&6000 TO &6031:READ a$
80 a=VAL("&"+a$):c=c+a:POKE ad,a
90 NEXT:IF c<>&E26 THEN 240
100 MODE 2:INK 1,26,26
110 INPUT "ALTER DISC FOR INF AMMO";y$
120 IF UPPER$(y$)="Y" THEN 200
130 INP[UT "RESTORE DISC FOR AMMO";y$
140 IF UPPER$ (y$)="Y" THEN 210
150 INPUT "ALTER DISC FOR IMMUNITY";y$
160 IF UPPER (y$)="Y" THEN 220
170 INPUT "RESTORE DISC FOR ENERGY";y$
180 IF UPPER$(y$)="Y" THEN 230
190 MODE 2:PRINT"LOADING.."...CPM
200 POKE &600D,0:CALL &6000:GOTO 110
210 POKE &600D,&3D:CALL &6000:GOTO 110
220 POKE &6029,0:CALL &601C:GOTO 110
230 POKE &6029,&3D:CALL &601C:GOTO 110
240 PRINT "DATA ERROR.." LIST 10-60
```

Well, that's it for hacking this month, you can tell because I'm just about to run out of paper. If perchance some kindly fellow wakes me up next month by rustling a large cheque under my nose, I'll see you then. Until that time, I leave you with this topical thought: Do water rats pay vole tax?

Luv 'n' stuff, Vax

BrunWord

Complete Word Processing Package £30

BrunWord 6128 is a complete word processing package consisting of three programmes, a word processor, a spelling checker and a card filing programme. It is written to run on a standard unexpanded CPC6128 (or CPC464 + disc + 64K) and is optimised for use with a single disc drive. The latest version was released in October 1988 and out performs any other word processor for the CPC6128.

The integrated spelling checker of BrunWord 6128 and its 30,000 word dictionary load at the same time as the main programme. We invented a special system to compact the dictionary so much that each word is represented by just one and a half characters. With such a compact dictionary, we are able to store this in the 64K of banked memory, making access very convenient and exceptionally fast.

Our closest rival claimed that their spelling checker achieves 'up to 2000 words per minute'. Our tests, published at the October 88 Amstrad show, revealed that its average speed for a file of 3366 words was only 526 words per minute and much more to our surprise, that it required eight changes of the disc to complete the spelling test. Our spelling checker achieved 3883 words per minute for exactly the same test (7 times faster!) and needed no disc in the drive. Remember that all other word processors need to load the dictionary from disc during the spelling test, even the so called ROM versions.

BrunWord has a 40 page manual which has several detailed examples, starting with step by step instructions to produce and print a simple letter. But your very first step is to load the TUTOR file into BrunWord. This takes even the complete novice straight into word processing and demonstrates the powerful editing and formatting features of BrunWord. There are also examples of printer control, showing how to create headings, to underline or to emphasise, and five deliberate spelling errors for you to correct. The tutor takes about 20 minutes to run through and after that you will feel confident to type in your own text.

BrunWord Features

*40, 80 or 128 column display. *Touch typing speed over 200 words/min. *True insert or overwrite. *Justify or unjustify paragraph or whole text. *Justified text has balanced appearance. *Instant word wrap. *Block save, move, copy, insert and delete. *Local editing with word delete/undelete. *Adjustable margins and TABs. *Column/Line/Page display with file name. *True word count. *Find and replace. *Help menus. *Memory filing system. *Single character embedded printer commands (18 with 3 printer codes and 21 with 10 printer codes). *Page throw markers. *Multiple copies. *Odd/even page headers/footers with page numbers. *Multi file printing (new page or continuous). *Print specified pages. *Works with any printer. *True display superscript and subscript numbers. *User defined print characters. *Load ASCII files from other word processors. *Save ASCII files for other word processors. *Files can be encrypted. *Maximum file size about 9 pages of text.

BrunSpell Features

*Memory resident with word processor. *Checks 4,000 words/min. *30,000 word dictionary. *No American spellings. *Add up to 5,000 of your own words. *Instant lookup. *Helps to find correct spelling. *Automatic correction.

DataFile Features

*Alphabetical, numerical, date sorting on any field. *User defined headings. *Search routine. *Data merging into BrunWord. *Label printing.

BrunWord ROM

We are often asked if we have a ROM version of BrunWord. The fact is we put BrunWord on ROM two years ago and even started the work to put the spelling checker AND the dictionary on ROM. The idea was to offer to update our customers' ROMs to include their own words. (How else would it be possible unless we cheat and put the dictionary on disc?). BrunWord 6128 with its spelling checker, 30,000 word dictionary and card filing programme needed 6 ROMs and would sell for considerably more than the disc version...... Let's just say that the idea is not completely dead.

Info-Script £50

Info-Script is a complete data processing package and includes all the features of the BrunWord 6128 package. The database uses many of the internal routines of the word processor, making a very compact combination and allowing both programmes, 6 pages of text and 1000 names and addresses to be in the memory at the same time, using an unexpanded CPC6128. The great advantage of this is the speed and convenience of being able to access both programmes and their related data without any disc delays. Add to this the progressive search routines, the unique four marker system and the arithmetical functions and you will begin to understand the excitement of our customers.

Database Features

*Very fast (e.g. takes 1 second to search 2000 addresses for surname 'Smith', initial 'B'). *Specific field search and/or progressive general search. *Instant sort on any field, alphabetical, numerical, date or reverse order (takes no time as the data does not move). *3 sets of user defined headings for each file. *4 markers for instant selection, plus one temporary marker. *Markers can be cleared or inverted and any pair can be added (allows complex searches to be quickly and easily performed). *No setting up of field type or length. *Efficient storage. *Relational records, Parents, Sons and Daughters. *Simple field to field arithmetic with running total. *Direct data merging into BrunWord. *Easy direct label printing, 1 across, 2 across, left of 2 or right of 2. *Single or multi-step.

Data Merging Features

*Simple intelligent system, &N &A &D construct full name, full address and date. *&1 &2 etc specify individual fields. *Insert or fixed format merging. *Automatic justify after merging. *Single step (see before printing) or multi-step. *Stop any time, go to word processor, restart same place. *Merge data from several records for summary, invoice, purchase order etc. *Simple arithmetic. *Running total. *Running VAT total. *Conditional loading. *Conditional printing. *Repeat patterns.

Upgrade £32.50

Send your BrunWord instruction manual (and one of your BrunWord discs if you have purchased a backup copy) and a cheque for £32.50. We will send you the Info-Script manual and one new Info-Script disc. Then send your BrunWord disc for us to update as your backup copy (cost included).

BrunWord Elite £90

Vic Barnes, of Shepherds Bush, London, is a photographic journalist. He earns his living from the typewriter, or to be strictly accurate, from his CPC6128 + Star LC24-10. His work can be seen in various magazines including a recent article, with his own stunning photographs, about touring Scotland on his BMW motorcycle. He also regularly writes two Newsletters.

Prior to December 1989 he was a dedicated Protext ROM user and had said that he could not imagine ever wanting to change his word processor. Quite typically, it was soon after saying that that he noticed our BrunWord Elite advertisement. He gave us a long and detailed grilling over the telephone and promptly sent us an order. His order has the distinction of being the very first BrunWord Elite order in our order book. It was dispatched to him on 21st November 1989.

On December 10th he wrote:- "I've spent quite a few hours thrashing your quite brilliant programme, which so far has proved completely bug free. I have enclosed copies of the first two Newsletters created with it... I am now eager to produce more complex layouts. BrunSpell is amazing, no - turbo-charged! The 'look-up' feature has proved to be instantaneous. Info-Script seems very comprehensive but I still have a lot to learn... ".

We have had several telephones calls from him since, and happily he is still just as impressed. On Friday 5th January, he rang with a query about footers and without being prompted said "I haven't used Protext since I received BrunWord Elite". What more can we say?

(We asked permission to use his name & address).

100 Letters £15

This is a utility for use with Info-Script, enabling pre-written letters to be easily selected and personalised. It is supplied with a library of over 50 letters.

Free Booklet

We have written a 16 page booklet which explains all about our programmes, starting with BrunWord 6128 and going on to Info-Script and BrunWord Elite. It is free to all CPC owners. Simply write your name and address in block capitals on a sheet of paper and send in a envelope to 'BrunWord & Printer', Brunning Software, at the address below.

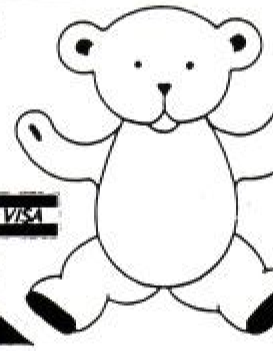
Letters

Regretfully I have recently upgraded my computer system to a 'PC' and I have sold my Amstrad CPC664. I therefore can no longer use your excellent software. I found BrunWord a powerful and easy to use programme from which many of the ungainly 'PC' word processors could learn a great deal. Many thanks for your hard work and good luck with your future products.
Mr M (Camberley).

Find enclosed my second disc for updating to BrunWord Elite. The reason for writing is to say how much I appreciate your product. I have used Info-Script and BrunWord for years now and find it so easy to use. I don't think you have noticed that there are a couple of spelling mistakes in your Fonts & Examples disc... try BrunSpell its an excellent spelling checker. (Thanks we take the point!). Thank you for keeping me up to date with your products they really are excellent, keep up the good work.
Mr W (Tipton).

Your BrunWord is certainly very good. My wife suggested that I might need a better computer than my Amstrad CPC6128. My reply is that this would mean accepting an inferior word processor.
Rev H (Wigan).

Send cheque/PO/Access number/Visa number to:



Brunning Software
34 Helston Road,
Chelmsford, Essex, CM1 5JF
Telephone (0245) 252854 (24 Hours)

BrunWord 6128 with BrunSpell & DataFile. . . £30.00
BrunWord 464 with BrunSpell & DataFile. . . £30.00
BrunWord Elite 6128, Info-Script & BrunSpell. . £90.00
Info-Script 6128 with BrunWord & BrunSpell. . £50.00
100 Letters (needs Info-Script). £15.00
BrunWord Elite and Info-Script include backup disc.
(All supplied on 3in Disc - state which computer)

All prices are inclusive for UK. Overseas orders sent insured air mail - Europe add £2.50 : Rest add £7.50

Headline

with

BrunWord Elite

The Elite System for 9 Pin Printers £69

In our advertisement last month we explained about the common sense of buying a 24 pin printer, even though this might cost more than the computer that you are using. Many CPC users, although heartily agreeing with us, simply cannot justify the expense and are forced to continue using their well worn but faithful and reliable 9 pin printer.

Opposite this page is our usual advertisement printed from BrunWord Elite using a 24 pin printer. The original is A3 size and it was photographically reduced to A4. The final result, with the combination of 24 pins and A3 to A4 reduction, gives a quality that is comparable to a laser printer.

This page is printed using a 9 pin printer (Star LC10) which costs just £180. Any Epson compatible 9 pin printer with quad graphics could have been used.

Headline

Our new utility 'Headline' when used with BrunWord Elite takes a 9 pin printer into a new dimension. We cannot change the basic resolution of the 9 pin printer, which is set by the actual thickness of the print pins, but what we have done is enabled the printer to use the 24 pin fonts for the larger characters. Add to this the powerful page formatting features of BrunWord Elite and you can see the result.

Star LC10

The Star LC10 is a good choice to print this page as it can be left to perform the task without human intervention. A printer without reverse line feed such as the Amstrad DMP2160 could be used and would produce an almost identical page, including all the lines, the large high quality lettering and the columns. (The BrunWord teddy was not printed). Even our old Epson RX80 produces a very acceptable page, though old age makes the pins a little wobbly. However, this complexity of layout cannot be achieved without resetting the paper during the process, so for printers without reverse line feed, the programme will stop at critical points, and request the paper to be reset to the top of the page. It will then wind on the paper to the exact position that is needed.

Headline has some powerful features. As you can see, these columns have true micro justification. The space between letters is adjusted to give the column an even right margin, rather than the space between words. Single or double height can be used but the width can be expanded from normal width to 2 times, 3 times, 4 times, 5 times... up to 9 times! The programme can even automatically adjust the width to the maximum possible for a particular column. This is very useful with headings. Set double height and nine times width, then let the programme give you the widest heading possible.

24 Pin Fonts

Let's give a little more thought to the use of 24 pin fonts. Study the top wide paragraph. The letters are very clean with good descenders but somewhat larger than normal printing. That's our favourite 24 pin font 'Fineline', while the page heading uses our 24 pin 'Comput' font in normal and double height. It's obvious if you think about it that 24 pin fonts printed on a nine pin printer will come out taller and wider. The heading is actually three times larger than normal 9 pin printing. And as if all this isn't enough to excite your interest, Headline actually has the ability to use the 32 pin fonts which we currently have under development. These give even higher quality to large headings.

The bulk of the printing on this page, including this paragraph, is in our 'Slimline' font, while our name and address at the bottom uses the middle size 'Finetype'.

Multi-Strike

Another powerful feature of Headline is designed to overcome faint printing which is often a problem with 9 pin printers. Headline can be set to multi-strike up to 9 times. This advertisement used double strike on a nearly new ribbon for the final printing but it is possible to squeeze black printing out of quite an old ribbon.

Bad News

So where is the catch? Well, it is almost all good news but obviously, using a 9 pin printer will be much slower than a 24 pin printer and a 9 pin printer can take 3 or 4 times longer for the same density printing. And the programme needs very much more memory for its own use during printing so Headline is loaded in place of the spelling checker and uses the 64K banked memory as its work space. The spelling checker is used in its normal way but needs to be reloaded after using Headline.

32 for 24

Finally, an exciting utility will be released soon for 24 pin printers. It will enable the use of extra high quality 32 pin fonts and be able to print headings up to 1.5 inches tall.

For £69.00

The Elite system for 9 pin printers consists of BrunWord Elite, Headline, BrunSpell, a printer lead, 8 bit printer status port and 7 'type setting' fonts (fonts are 24 pin in size but only for 9 pin printers). Total price £69.00 inclusive.

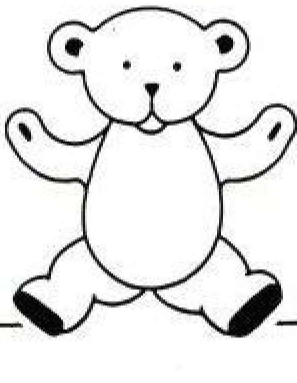
For £99.00

The Elite system as above but also including Info-Script, total price £99.00 inclusive.

Send cheque/PO/Access/Visa number to :-

Brunning Software

34 Helston Road
Chelmsford, Essex, CM1 5JF.
Telephone 0245 252854



Headline (needs BrunWord Elite).... £21
BrunWord Elite, Headline, BrunSpell.. £69
Elite, Headline, BrunSpell, Info-Script. £99
(All supplied on 3 in disc)

For CPC6128 (or CPC464 + disc + 64K).
Europe add £2.50 : Rest add £7.50.

Elementary Application.

Dr. Dorn gives a few sleuthing tips on how to turn detective



Greetings once again, problem solvers, and welcome to the column that tries to help you get the best from your applications software. This month, a bit of a departure from the norm, brought on by minor problemettes with Postman Pat and his black and white cat, and my mail ending up in sunny Washington DC – and I don't mean Durham County!

While the post finds its way back from the colonies (or wherever it has actually ended up – the PO are tracing it even as I type), I thought I'd take the opportunity to lead you through the process of solving an applications problem, or how to help me help you.

Now, before you all jump the gun and start writing angry letters of complaints to our illustrious Editor, this isn't meant to imply that your letters aren't welcome. Not a bit of it! I enjoy reading them (especially those which sing my praises before we get to the nitty gritty – those bits get censored) and trying to track down the cause of your temporary hiccups. Also, most of your letters have all the information I need to make a pretty good guess as to what the problem is.

However, it has occurred to me on more than one occasion that the time lapse between a letter being penned and its reply appearing in the magazine can be considerable – we're talking of a minimum of three months, and often more. So, a little help might be no bad thing! (Careful, DD, you might be talking yourself out of a job – Ed).

Where do you start when a problem hits? The first thing to do is relax, get a cuppa, a notepad, pencil and the manual for the application of hardware that's causing the problem. Leave the machine to fester for a few minutes – it isn't going to run away!

Those of you that indulge in the evil weed will probably need to have a few handy too! (I speak from experience here, folks, but don't even think about thinking about it if you aren't already hooked – it's a foul habit – sermon over.)

OK, the next step is to make a few notes. Write down exactly what you THINK you did for the five minutes previous to hell breaking loose, in single steps if you can break it down that far.

Once you've done that, the time has come to get the hands a little bit dirty.

Reboot your machine, and then boot the software that you were using. (We'll cover hardware problems later). Try to re-create the fault by following the steps you've written down, but tick each step as you go. If it doesn't recur, you've probably miskeyed somewhere, either to cause the problem, or in trying to recreate it.

If it's the former, it points towards lousy error trapping in the software. This is not at all uncommon. I use a piece of software that costs £200, in conjunction with another at about the same price point, and both have major problems with error trapping.

What it means in practice is as follows.

Say a program needs a particular response from a choice of five at some point in its execution. In an ideal world, if you respond in a way other than the specified five, it ought to ignore what you've done, or maybe sound an angry beep to tell you you've been daft. It ought only to respond to the five actions its expecting, and nothing else. Sometimes, however, the author has slipped up, and forgotten to exclude a sixth possibility.

Now, this may take the form of the

most impossible combination of keys that it's ever likely a human could press with all ten fingers on the keyboard. Even so, I'd bet a pound to a penny that, somewhere, at sometime, someone will manage to find that sixth option that shouldn't be there. The program doesn't see it as an error, and may branch out to a part of its code that was never meant as an entry point, and the whole thing goes haywire. This is what is commonly known as a BUG, and they're annoying!

Error trapping means making sure that things like that don't happen, so, coming back to where we were, if you've found a sixth option, careful keying will solve your problem. But if that's not the cause, and the error is repeatable time after time?

This is where the sleuthing gets interesting. Next step is to open the manual, sit down, and examine it minutely for references to the part of the program you're in when the worst happens. Let's say you're using a program to complete a graph under AMSDOS, and it won't draw the red graph bars, but just leaves a space, in the background colour, where the red bits ought to be.

The manual tells you nothing, but advises you to start the program from a freshly re-set machine. Look back at your notes. Did you start from a freshly switched on CPC? Or had you just been running another application? If it was the former, then we have to dig deeper, but if it was the latter, a solution may present itself with a little lateral thought.

Run the other application, and exit it – there may be no need to do anything



constructive in it. Then, try to print a few characters in each of the pen colours the mode your problematic application runs in (I'm assuming Mode 0 or 1 here). Does the red show up where it ought to? No? Then you've found the cause of the problem. The second application is messing with the inks, and not re-setting them to default when it ends. The problematic program isn't checking they're at default values when it starts, it's as simple as that. The cure is straightforward – re-set the machine before you boot the problem program.

If that wasn't the problem, what then? As I said earlier, deeper digging will be called for. However, it's most unusual for problems to be caused by complicated happenstances. In most cases, the root is something very simple – an overlay missing or corrupted, a printer drive for the wrong printer being used, not booting the program in the right screen mode (that STILL happens, believe it or not), typing 'l' for '1' and vice versa, or '1' for 'I' in the wrong place.

Check everything, then re-check. Make copious notes, and let your brain take the strain. And so to hardware problems.

The two most problematic areas I ever see are Printers and Serial Ports. The latter are usually simple to sort out, but are very much misunderstood. Unfortunately, there has been a great 'black art' label stuck on serial ports (RS232C interfaces) and the equipment they interface with, but problems involving them are usually quickly solved with a breakout box and a few LEDs. OK, I know that not everyone has access to such things, but thankfully, fixes for most problems are pretty well known by now, and that's where columns like Applications Advice come in.

Printer problems are normally down to one of three things – either a lead problem (the ubiqituous pin 14 double line feed syndrome), a dip switch problem, or a wholly understandable inability to make head or tail of the manual!

Dip switch problems are usually easily sorted out by reference to the manual, and therein lies the main bugaboo. Printer manuals are, for some strange reason, the most unintelligible documents known to man. The writers of such arcade tomes must be totally insensitive to the needs of their readers. For instance, most Epson compatible printers have more than one way to set, say, expanded (double width) printing.

One way acts only on one line, and is switched off automatically either when a carriage return is received, or when the end of the line is reached physically on the platten and the printer itself initiates a line feed. Another acts on everything the printer receives until it gets a message telling it to switch double width off. Problems arise when the manual doesn't make it clear which one's which, and it isn't just limited to double width, either.

Just deciphering how to print graphics characters on some printers can cause premature balding and snow white hair (what's left) – have a glance at my picture for proof! Dip switch settings seem to have a similar effect on manual writers. Inevitably there is no 'on' or 'off' marked on the switches themselves, and the manual refers to 'up' or 'down'. But which is UP??? Where was the manual author standing when he wrote it? Did he use THAT printer to proof tint his work? (answers on a ten pound note to the usual address, please!)

In these cases, there is only one option – trial and error. For all the use the worst of the manuals are, they might as well be written in Japanese – I'll resist the obvious comment!

So, there you have it – two pages on getting a start in trying to isolate the cause of a problem and then curing it.

It isn't always easy – I'm often stumped – but it's usually pretty certain that someone has had the same problem in the past. A letter to this column will quite often seek that person out, and help not only you, but many other folks who couldn't bring themselves to write in.

That's one reason that I welcome your feedback and assistance with other readers' problems. There's no way on earth that I can have access to every application and peripheral that exists for the CPC, and even if I did, there's no guarantee that I could re-create a problem and then solve it.

Oops! It looks like space has beaten us again. Next month, things will be back to normality (I hope) with your problems and help taking pride of place on these pages. Until then, get those fingers tapping and let us know of your trials and tribulations, and as a famous Vulcan once said – live long, and prosper.

$3^1/2''$ DISC DRIVE ONLY £79.95

BOOK STORAGE PER DISC **PLUS £3 CARRIAGE**

Because the $3^1/_2''$ disc is now the industry standard, their cost is getting lower all the time. CHECK OUR CURRENT PRICE! You can take advantage of this with our top brand TEAC $3^1/_2''$ drive. Using it together with either ROMDOS, RAMDOS or RODOS, you can store 800K of files on each disc, and without even having to turn it over.
In its sleek white case the drive measures a mere $6^3/_4'' \times 4'' \times 1^1/_4''$ (including its feet) and is supplied with leads and power supply. All that you have to do is plug it in and use it.
Please state 464, 664 or 6128 when ordering. This drive is NOT suitable as a 1st drive on the 464.

NOTES

$3^1/_2''$ discs do not turn over like the 3" ones. The drive uses both sides but to you it looks like 1 huge side.

64K DKtronics RAM PACK....£44.95
ROMDOS (rom)..............£29.95
RAMDOS (disc).............£24.95
3" DISCS (Maxell)......10 for £20.00
$3^1/_2''$ Discs..............10 for £7.50
........................30 for £20.00
$3^1/_2''$ LOCKING DISC BOX
(holds 40)..................£7.00
PRINTER LEAD (6 feet)
see notes...................£8.00
EPROMS 32k
(works ok as 16k)...........£2.50
Carriage free on these items

NOTES - please read

Ramdos is the only one of the 3 systems that will work in CPM. The Ramdos disc is included with Romdos. Rodos version 2.15 and Protext do not work together. The Romboard Xtra is not now being made due to the 6128 rom being unavailable. The $3^1/_2''$ disc boxes will hold 3" discs but not as many. The length of the printer lead you need can be specified up to 6'. For longer leads please add 50p per foot.

EPROM PROGRAMMER

only £30 inc. p&p

Create your own ROM based software on 16K, 8K, 21V & 12.5V EPROMS. Easy to use menu driven software. No external power supply needed.

MICROSTYLE

DEPT A.C.U., 212 DUDLEY HILL ROAD, BRADFORD, BD2 3DF

tel: 0274 636652 (after 2pm).
Prestel mbx. 219999114

Soft Exchange

ALL FUN SCHOOL 2 RANGE £6.99 CASS £8.99 DISC

£1.45 EACH or 3 FOR £3.99

Blood Valley
Indoor Sports
Biggles
3-D Chess
G. Capes
Strongman
Ninja Massacre
Motor Massacre
BMX Simulator
Adv. Pinball Sim.
Super Hero
Big Foot
G. Prix Sim.
Pro. Ski Sim.
3-D Starfighter
Death Stalker
Fruit Machine
Mission Jupiter
Int. Rugby Sim.
A.T.V.
Pro-Snooker
Planet of Death
Souls of Darkon
Inca Curse
Starion
Shockway Rider
Jockey Wilson's Darts
Max Headroom
Impact
Armageddon Man
Yes Prime Minister
Rally Simulator
Shadowy Swimmer
123
Hit Squad
Yogi Bear
SAS Combat
Elevator Action
Antriad
Thurst
SAI Combat
Codename Mal
World Games
BlackBeard
Alien Break In
Into Oblivion
Feud
Avenger
Master of Lamps
Future Knight
Micro Value 4
European S.A. Side
Zynaps

CASSETTES ONLY

Thunderbirds	£4.99	Dragons Lair 1	£3.99
Con. Circus	£4.99	Dragons Lair 2	£3.99
Ninja Warrior	£5.99	Last Duel	£6.99
Galaxy Force	£5.99	Road Runner	£6.99
Powerach	£6.49	Jack the Nipper	£2.99
Shinobi	£6.49	Bedlam	£2.99
Nemes's	£6.49	Run the Gauntlet (C)	£6.99
Cluedo	£2.99	Blasteroids	£6.99
Monopoly	£2.99	Evening Star	£2.99
Scrabble	£2.99	Nexus	£2.99
Scalextric	£3.49	Star Raiders II	£1.99
Samura Warrior	£3.49	Not a Penny More	£2.99
Bubble Ghost	£2.49	Gargoyle Classics	£2.99
Rex	£2.49	War in Middle Earth	£6.99
Running Man	£3.99	Arcade Force 4	£6.99
Wizard Wars	£2.99	Rod Pykes Collec	£4.99
Renegad 3	£3.99	Go Crazy (6 games)	£4.99
Wizball	£3.99	Flight Ace (4 games)	£4.99
F. Manager	£3.49	Drilled	£2.99
Super Hang On	£2.99	Pyroword	£2.99
Circus Games	£3.99	Stiff Lip & Co	£1.99
Thunderblade	£5.49	Melbourne Draw	£2.99
Super Sports	£2.99	The Sydney Affair	£2.99
Padand	£4.99	Max Headroom	£1.99
Bionic Commando	£3.99	Football Man 2	£4.99
Netherworld	£2.99	Outrun	£4.99
G. Prix Selection	£5.99	Gemini Wing	£4.99
Offshore Warrior	£3.49	4 Soccer sim	£3.99
Titan	£3.49	Afterburner	£4.99
Hercules	£2.99	Barbarian	£3.99
Victory Road	£3.99	Druid 2	£1.99

GAMES ON DISC

6 Pack Vol 3	£9.99
Afterburner	£7.99
Galaxy Force	£7.99
Real Ghostbusters	£7.99
Overlander	£6.99
Hopping Mad	£6.99
Shinobi	£9.99
Altered Beast	£9.99
Super Scramble	£9.99
Basketball	£9.99
Baseball	£9.99
Classix 1	£8.99
Navy Moves	£11.99
Chap Sprint	£12.99
Movie	£4.99
Eye	£4.99

Maxell Blank Disc
£2.25 each or
£20.99 for 10

AMS 30L Storage Box
£10.99

	CASS	DISC
Beverly Hills Cop	£6.99	£10.99
Bloodwych	£6.99	£10.99
Cyberball	£6.99	£10.99
Myth History in Making	£6.99	£10.99
P47 Thunderbolt	£6.99	£10.99
Rainbow Island	£6.99	£10.99
The Champ	£6.99	£10.99
The Biz	£11.99	
Kick Off		£11.99
Chase H.Q	£6.99	£10.99
Ind. Jones Last Crus	£6.99	£10.99
Turbo Outrun	£11.99	
Batman the Movie	£6.99	£10.99
SuperWonderboy	£6.99	£10.99
Ghouls 'n' Ghosts	£6.99	£10.99
Op Thunderbolt	8.99	£11.99
Wild Streets	£8.99	£12.99
100% Dynamite	£10.99	£11.99
Complete Games Centre	£7.99	£10.99
Hds	£10.99	
House Mix	£7.99	
In Crowd	£10.99	
Oriental Games	£6.99	£12.99
Star Wars Trilogy	£12.99	£16.99
Story So Far 2	£10.99	£12.99
Story So Far	£10.99	
The Bizz	£10.99	
Thrilltime Gold 1	£7.99	
Thrilltime Gold 2	£7.99	
We Are Champions	£10.99	£12.99

Orders under £5.00 add 50p P&P. Send Cheque/P.O. to:

01-653 9094 **Soft Exchange** **01-653 9094**

101 Clifton Road, South Norwood, London SE25 6QA

Smogware Systems

SMOG SAYS: "BETTER BASIC - additional commands (RSXs) painlessly.

RSX-LIB (1.0)
The RSX library utility

"everything to manipulate RSXs and enable them to be used in an easy systematic manner is here" **ACU Dec '89**
"great if you program in any way shape or form... makes creating RSXs a dream" **AA Dec '89**

Extend the power and versatility of your CPC's BASIC – now!
RSX-LIB is a complete RSX management system, not just a collection of RSXs:

* Access to machine code routines scattered across many files and discs, for ultimate use as RSXs (bar commands).
* Centralised functional documentation of all your routines (an RSX database, in effect, but much more!)
* Storage of all routines on disc in a single form (as non-RSX code).
* Automatic conversion of RSX code to non-RSX code – split out the code for each RSX, and (selectively) save to disc.
* Builds RSX files from the non-RSX code at the touch of a few buttons – a LOAD and a CALL is all you need to install your new BASIC commands!
* RSX files only contain the RSXs you require (saving valuable memory) and are free-standing (you don't need RSX-LIB in memory to run them).
* All RSX-LIBs RSX files can be placed anywhere in memory. RSX-LIB can alter code at run-time to suit the current location – even code which is not normally relocatable! As far as we know, only RSX-LIB can do this!!!
* Eliminates problems with routines requiring the same area of memory.
* Intelligent disc handling – RSX-LIB knows which disc you have in the drive, which you need next, and prompts for a change if required.
* Automatic saving of the library after a set number of changes to it.
* Free 'starter pack' of 52 varied RSXs in RSX-LIB's library.
* You can add your own code (or magazine type-ins) to the library, and create your own customised collection of routines. Just dip in when you need that extra command – you'll wonder how you ever did without!
* Really simple to use – no machine code knowledge required!
* All functions accessed from RSX-LIB's menu screen.
* Comprehensive and friendly manual, explaining RSX-LIB's functions and documenting the 52 RSXs supplied.
* Example program showing the use of the 'starter pack' RSXs.
* **RSX–LIB** is suitable for all CPC machines, but is supplied on DISC ONLY.

Orders generally sent by return. Send cheques (£ Sterling)/UK P.O.s for £19.95 (EUROPE: Add £1.50, REST OF WORLD: Add £2.00) or all embossed credit card details (24 hour order line 0603 749132) to: **Smogware Systems, Dept ACU, 20 Grove Avenue, New Costessey, Norwich NR5 0HN.**

VISA

NEMESIS presents

NEW MAX I DOS NEW

RAMDOS COMPATIBLE

"Made to make your mouth water!"

COMAPTIBLE WITH RAMDOS D1, D2, D10, and D20 formats as well as AMSDOS SYSTEM and DATA formats. MAXIDOS is able to perform all the essentials functions on RAMDOS formats as well as "normal" AMSDOS formats. Previous "tricky" or impossible tasks under RAMDOS have become simpler due to the way MAXIDOS implements it's functions at the lowest possible levels, interacting directly with the Discx Controller hardware. All this and more;

FORMAT SYSTEM & DATA
FORMAT RAMDOS FORMATS
FILE COPY BETWEEN FORMATS
DISC BACKUP
COMPLETE FILE STATUS EDIT RENAME ERASE UNERASE SET SYSTEM - SET USER READ ONLY - READ/WRITE
SECTOR EDITOR
DIRECTORY EDITOR
STRING/BYTE SEACH
FILE MAPPING
"KILL" ERASED FILES
FORMAT IDENTITY
PRINTER OUTPUTS
VIEW FILES

Also includes **OPTIMIZER**,
The only implementation of this fascinating file re-organiser seen on a CPC. OPTIMIZE re-arranges files on your disc (standard or RAMDOS) to consecutive blocks which enhances loading speed. After you've erased and saved to a disc a few times your files are "scattered" all over the disc - OPTIMIZE tidies it all up!

AVAILABLE BY RETURN OF POST,
EXCLUSIVELY FROM NEMESIS

Supplied on Disc ***£13.75*** *inclusive.*

NEMESIS TEL (0933) 623967

10 CARLOW ROAD, RINGSTEAD, KETTERING, NORTHANTS. NN14 4DW

Only
£24.95
Including VAT and p&p.
Save £5 on RRP of £29.95 when you order direct from Connect Software

MONEY MANAGER

Amstrad CPC 464, 664 and 6128
(disc only)

Versions available for Amstrad PCWs and PC compatibles. Phone or write for details.

Over 25,000 sold in UK alone

Financial management software for personal and/or small business use

Money Manager provides individuals, businesses and professional people with a simple yet powerful way of managing their financial activities. All transactions can be entered easily and then presented in a wide variety of reports, ranging from a detailed listing of expenditure for tax purposes to summaries showing, for example, how much money has been spent over the past twelve months on petrol or electricity. Reports can also be presented in graphical form as pie and bar charts.
The Money Manager package has over 25,000 users in the UK alone. It is the ideal program for people who find that traditional accountancy programs are too complicated, unweildy and time-consuming for their requirements.

- **Any number of data files: Personal, Business, Accounts etc.**
- **12 months per file, up to 100 entries (transactions) per month**
- **Move a file forward by a month at a time when required**
- **All options selected from the main menu**
- **Up to 9 user-defined accounts: Bank, Cash, Visa, Access etc.**
- **Up to 50 user-defined classes of income and expenditure**
- **A reference of up to 6 characters for each entry**
- **Your own descriptive text of 18 characters for each entry**
- **All the codes are displayed on screen whilst entering data**
- **Add, modify and delete existing entries at any time**
- **Quick insertion of standard entries and standing orders**
- **Entries can be sorted into date order automatically**
- **Single character 'mark' for even more selective reporting**
- **Reports showing each entry in a month or for whole year**
- **Reports may show classes merged into groups**
- **Spreadsheet type table showing class totals in each month**
- **Report showing class totals for each account**
- **Bar charts for up to 4 selected categories**
- **Pie charts of up to 10 selected 'slices'**
- **Report of monthly income, expenditure and cash-flow etc.**
- **Account statistics - monthly max, min, average, balance etc.**
- **Detailed input and Output VAT reports**
- **Automatic calculation of VAT**
- **Simply ignore VAT features if they are not required**
- **Budget and cash-flow forcasts - may be updated**
- **Data search facility to find 'lost' items**
- **User-defined screen colours**
- **Comprehensive manual**
- **Two sets of sample data for practice and familiarisation**
- **Free telephone support for as long as you need it**

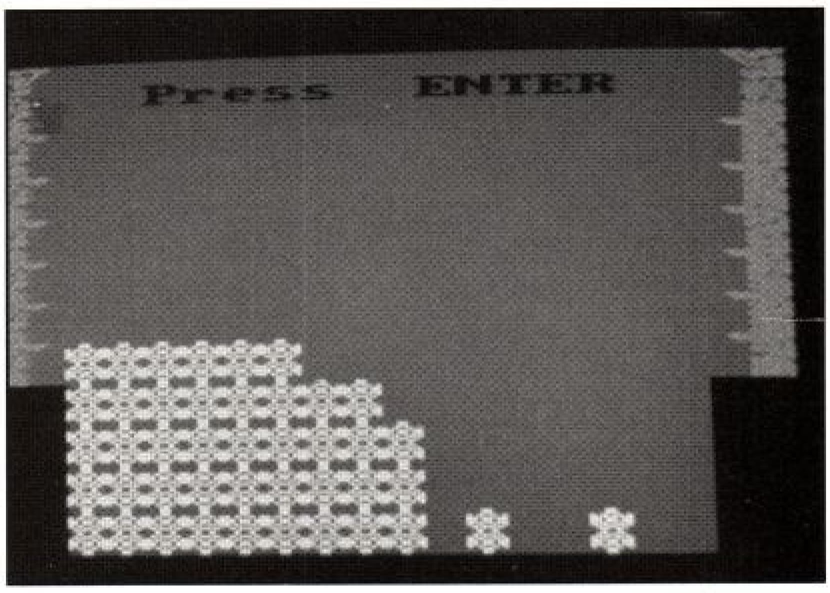
Connect
Software Ltd.

To receive your copy of Money Manager by return post phone us now with your credit card number, or write to us at the address below enclosing your cheque for £24.95

01 743 9792 8am-10pm, 7 days a week
Connect Software Ltd., 3 Flanchford Rd., London W12 9ND

VISA
AMERICAN EXPRESS

SQUEAKER



BY J. WILSON

Now then, have you ever put yourself in the place of the poor little squirrels when the cold grip of winter comes around? If not, this colourful game gives you the chance to experience it at first hand. Follow the prompts to choose the depth of the ravine and avoid the falling snowflakes as you struggle to get back into the trees using the cursor keys. Listen for the neat sound effects at the end.

```
10 FOR mm=&8000 TO &806B
20 READ ff$
30 POKE mm,VAL("&"+ff$)
40 NEXT mm
50 DATA F4,F3,F2,F1,03,00,01,00,00,10,00,00,05,05,00,02,04,01,00,00,00,00,00,00,
0A,00
60 DATA 00,00,21,01,00,2B,7C,FE,00,20,FA,C9,21,01,00,2B,7C,FE,00,20,FA,C9,21,01,
00,2B,7C,FE,00,20,FA,C9,21,01,00,2B,7C,FE,00,20,FA,C9,21,01,00,2B,7C,FE,00,20,FA
,C9,21,01,00,2B,7C,FE,00,20,FA,C9,21,01,00,2B,7C,FE,00,20,FA,C9,21,01,00,2B,7C,F
E,00,20,FA,C9
70 FOR nn=&809C TO &8372
80 READ fef$
90 POKE nn,VAL("&"+fef$)
100 NEXT nn
110 DATA 01,02,00,ED,43,05,80,3A;04,80,CD,DE,BB,11,FC,FF,21,F8,FF,CD,C3,BB,3A,03
,80,CD,FC,BB,11,E0,FF,21,10,00,CD,C3,BB
120 DATA 3A,02,80,CD,FC,BB,3E,01,32,06,80,21,06,80,CD,AA,BC,11,E4,FF,21,F8,FF,CD
,C3,BB,3E,01,CD,DE,BB,11,00,00,21,00,00,CD,ED,BB,C9
130 DATA 01,01,00,ED,43,05,80,3A,04,80,CD,DE,BB,11,FC,FF,21,F8,FF,CD,C3,BB,3A,01
,80,CD,FC,BB,11,E0,FF,21,10,00,CD,C3,BB
140 DATA 3A,00,80,CD,FC,BB,3E,01,32,06,80,21,06,80,CD,AA,BC,11,E4,FF,21,F8,FF,CD
,C3,BB,3E,01,CD,DE,BB,11,14,00,21,00,00,CD,ED,BB,11,EC,FF,21,00,00,CD,C3,BB,C9
150 DATA 01,01,00,ED,43,05,80,3A,04,80,CD,DE,BB,11,FC,FF,21,F8,FF,CD,C3,BB,3A,01
,80,CD,FC,BB,11,E0,FF,21,10,00,CD,C3,BB
160 DATA 3A,00,80,CD,FC,BB,11,E4,FF,21,F8,FF,CD,C3,BB,3E,01,CD,DE,BB,11,14,00,21
,00,00,CD,ED,BB,11,EC,FF,21,00,00,CD,C3,BB,C9
170 DATA 01,02,00,ED,43,05,80,3A,04,80,CD,DE,BB,11,FC,FF,21,F8,FF,CD,C3,BB,3A,03
,80,CD,FC,BB,11,E0,FF,21,10,00,CD,C3,BB
180 DATA 3A,02,80,CD,FC,BB,11,E4,FF,21,F8,FF,CD,C3,BB,3E,01,CD,DE,BB,11,00,00,21
,00,00,CD,ED,BB,C9
190 DATA 3E,00,32,12,80,3E,00,32,13,80,3E,00,32,16,80,3E,04,32,17,80,06,15,21,64
,82,11,E2,82,3E,01,32,11,80,7E,32,14,80,23,7E,32,15,80,23,1A,32,18,80,13,1A,32,1
9,80,1B,E5,D5,C5,21,11,80,CD,AA
200 DATA BC,30,FB,C1,D1,E1,3E,02,32,11,80,7E,32,14,80,23,7E,32,15,80,23,1A,32,18
,80,13,1A,32,19,80,1B,E5,D5,C5,21,11,80,CD,AA,BC,30,FB,C1,D1,E1,3E,04,32,11,80,7
E,32,14,80,23,7E,32,15,80,23,1A
210 DATA 32,18,80,13,1A,32,19,80,13,E5,D5,C5,21,11,80,CD,AA,BC,30,FB,C1,D1,E1,10
,89,C9
220 DATA DE,01,24,03,BC,03,00,00,00,00,BC,03,DE,01,24,03,BC,03,00,00,00,00,BC,03
,DE,01
230 DATA 24,03,BC,03,00,00,00,00,BC,03,DE,01,7E,02,24,03,00,00,00,00,24,03,92,01
,7E,02,BC,03,00,00,00,00,BC,03,AA,01,7E,02,BC,03,00,00,00,00,BC,03,AA,01,24,03,F
C,04,00,00,00,00,FC,04,DE,01,24
240 DATA 03,FC,04,00,00,00,00,FC,04,DE,01,CC,02,FC,04,00,00,00,00,FC,04,FA,01,CC
,02,FC,04,00,00,00,00,FC,04,DE,01,24,03,BC,03,46,00,0A,00,32,00,0A,00,0A,00,0A,0
0,46,00,0A,00,32,00,0A,00,0A,00
250 DATA 0A,00,32,00,0A,00,0A,00,0A,00,32,00,0A,00,0A,00,0A,00,A0,00
260 DATA 3E,05,CD,DE,BB,06,0F,DD,21,37,83,FD,21,55,83,DD,56,00,DD,5E,01,FD,66,00
,FD,6E,01,DD,23,DD,23,FD,23,FD,23,C5,CD,F9,BB,C1,10,E5,C9
270 DATA 00,08,00,00,00,04,00,00,00,08,00,00,FF,F8,00,00,FF,FC,00,00,FF,F8,00,00
,00,10,00,00,FF,F0
280 DATA 00,00,00,08,00,00,FF,F8,00,00,FF,FA,00,00,FF,F0,00,00,00,10,00,00,00,02
,00,00,00,02,00,00
290 FOR fl=&8383 TO &8965
300 READ s$
310 POKE fl,VAL("&"+s$)
```

```
320 NEXT f1
330 DATA 3A,73,83,3D,3D,32,73,83,32,04,9E,C9,3A,74,83,3D,3D,32,74,83,32,04,9E,C9
,3A,75,83,3D,3D,32,75,83,32,04,9E,C9,3A,76,83,3D,3D,32,76,83,32,04,9E,C9
340 DATA 3A,77,83,3D,3D,32,77,83,32,04,9E,C9,3A,78,83,3D,3D,32,78,83,32,04,9E,C9
,3A,79,83,3D,3D,32,79,83,32,04,9E,C9,3A,7A,83,3D,3D,32,7A,83,32,04,9E,C9
350 DATA 3A,7B,83,3D,3D,32,7B,83,32,04,9E,C9,3A,7C,83,3D,3D,32,7C,83,32,04,9E,C9
,3A,7D,83,3D,3D,32,7D,83,32,04,9E,C9,3A,7E,83,3D,3D,32,7E,83,32,04,9E,C9
360 DATA 3A,7F,83,3D,3D,32,7F,83,32,04,9E,C9,3A,80,83,3D,3D,32,80,83,32,04,9E,C9
,3A,81,83,3D,3D,32,81,83,32,04,9E,C9,3A,82,83,3D,3D,32,82,83,32,04,9E,C9
370 DATA 3A,00,9E,F5,FE,03,20,05,CD,83,83,18,2A,F1,F5,FE,04,20,05,CD,8F,83,18,2A
,F1,F5,FE,05,20,05,CD,9B,83,18,2A,F1,F5,FE,06,20,05,CD,A7,83,18,2A,F1,F5,FE,07,2
0,05,CD,B3,83,18,75,F1,F5,FE,08,20,05,CD,BF,83,18,6A,F1,F5,FE,09,20,05,CD,CB,83,
18,5F,F1
380 DATA F5,FE,0A,20,05,CD,D7,83,18,54,F1,F5,FE,0B,20,05,CD,E3,83,18,49,F1,F5,FE
,0C,20,05,CD,EF,83,18,3E,F1,F5,FE,0D,20,05,CD,FB,83,18,33,F1,F5,FE,0E,20,05,CD,0
7,84,18,28,F1,F5,FE,0F,20,05,CD,13,84,18,1D,F1,F5,FE,10,20,05,CD,1F,84,18,12,F1
390 DATA F5,FE,11,20,05,CD,2B,84,18,07,F1,F5,FE,12,CD,37,84,F1,C9
400 DATA 3A,03,9E,3C,21,04,9E,BE,20,16,3A,05,80,FE,01,20,05,CD,41,81,18,0A,3A,05
,80,FE,02,20,03,CD,8D,81,C9,3A,00,9E,21,00,9D,BE,20,0F,3A,02,9E,21,01,9D,BE,20,0
6,CD,0C,83,CD,D0,81,C9
410 DATA 06,A0,11,3C,85,21,60,AB,1A,77,13,23,10,FA,C9
420 DATA 00,00,00,00,00,00,00,00,D0,60,40,80,00,00,00,00,0B,06,02,01,00,00,00,00
,0D,07,00,00,00,00,00,00,B0,E0,00,00,00,00,00,00,7F,3E,3E,1E,1E,7E,1E,3C,00,00,2
0,E0,B2,F7,7F,3F,FE,7C,7C,78,78,7E,78,3C,00,00,04,07,4D,EF,FE,FC,A5,DB,DB,A5,18,
18,00,00
430 DATA A5,DB,DB,A5,5A,24,24,5A,00,00,00,00,00,00,18,18,DB,A5,18,18,00,00,00,00
,DB,A5,5A,24,24,5A,A5,DB,00,00,00,00,18,18,A5,DB,18,18,00,00,00,00,00,00,5A,24,2
4,5A,A5,DB,DB,A5,00,00,18,18,A5,DB,DB,A5,24,5A,A5,DB,DB,A5,18,18,18,18,A5,DB,DB,
A5,5A,24
440 DATA 00,3E,07,CD,90,BB,3E,09,CD,96,BB,3E,02,CD,6F,BB,3E,01,CD,72,BB,3E,ED,CD
,5A,BB,DD,21,60,AB,3A,DC,85,87,57,3E,15,92,47,0E,01
450 DATA 82,82,6F,DD,75,00,C6,51,6F,DD,75,01,C6,54,6F,DD,75,02,C6,56,6F,DD,75,03
,C6,57,6F,DD,75,04,C6,5A,6F,DD,75,05,C6,5D,6F,DD,75,06,C6,5F,6F,DD,75,07,F5,3E,0
1,CD,6F,BB,79,CD,72,BB,0C,3E,EC,CD,5A,BB,F1,10,BD,C9
460 DATA 3E,07,CD,90,BB,3E,09,CD,96,BB,3E,13,CD,6F,BB,3E,01,CD,72,BB,3E,EE,CD,5A
,BB,DD,21,60,AB,3A,DC,85,87,57,3E,15,92,47,0E,01
470 DATA 82,82,6F,DD,75,00,C6,A1,6F,DD,75,01,C6,A4,6F,DD,75,02,C6,A6,6F,DD,75,03
,C6,A7,6F,DD,75,04,C6,AA,6F,DD,75,05,C6,AD,6F,DD,75,06,C6,AF,6F,DD,75,07,F5,3E,1
4,CD,6F,BB,79,CD,72,BB,0C,3E,EC,CD,5A,BB,F1,10,BD,C9
480 DATA 3A,DC,85,87,57,3E,14,92,4F,D6,02,CB,2F,47,3E,02,CD,6F,BB,79,CD,72,BB,0D
,0D,3E,F0,CD,5A,BB,10,EE,C9
490 DATA 3A,DC,85,87,57,3E,14,92,4F,D6,02,CB,2F,47,3E,13,CD,6F,BB,79,CD,72,BB,0D
,0D,3E,EF,CD,5A,BB,10,EE,C9
500 DATA 3E,05,CD,90,BB,3E,09,CD,96,BB,3E,05,CD,6F,BB,3E,02,CD,72,BB,21,21,87,7E
,FE,5D,28,06,CD,5A,BB,23,18,F5,3E,12,CD,1E,BB,28,F9,C9,50,72,65,73,73,80,80,45,4
E,54,45,52,5D
510 DATA 3E,04,CD,B4,BB,26,05,16,0E,2E,01,1E,01,CD,66,BB,3E,09,CD,96,BB,CD,6C,BB
,3E,02,CD,B4,BB,26,00,16,01,2E,00,1E,18,CD,66,BB,3E,09,CD,90,BB,3E,05,CD,96,BB,3
A,DC,85,87,87,57,3E,2A,92,47,D5,3E,8F,CD,5A,BB,10,F9,D1,7A,C6,04,47,3E,80,CD,5A,
BB,10,F9
520 DATA 3E,03,CD,B4,BB,26,12,16,13,2E,00,1E,18,CD,66,BB,3E,09,CD,90,BB,3E,05,CD
,96,BB,3A,DC,85,87,87,57,3E,2A,92,47,D5,3E,8F,CD,5A,BB,10,F9,D1,7A,C6,04,47,3E,8
0,CD,5A,BB,10,F9,3E,00,CD,B4,BB,C9
530 DATA 3E,01,CD,B4,BB,26,00,16,13,2E,17,1E,18,CD,66,BB,3E,05,CD,96,BB,CD,6C,BB
,3E,00,CD,B4,BB,C9
540 DATA CD,0D,BD,7D,E6,0F,F5,FE,0F,28,51,F1,F5,FE,0E,28,4B,F1,F5,FE,0D,28,45,F1
,F5,FE,0C,28,3C,F1,F5,FE,0B,28,36,F1,F5,FE,0A,28,30,F1,F5,FE,09,28,27,F1,F5,FE,0
8,28,21,F1,F5,FE,07,28,1B,F1,F5,FE,06,28,15,F1,F5,FE,05,28,0C,F1,F5,FE,04,28,06,
F1,F5,FE,03
550 DATA 20,0C,F1,18,11,F1,18,14,F1,18,16,F1,18,19,F1,3A,00,9D,3D,3D,18,16,3A,00
,9D,3D,18,10,3A,00,9D,18,0B,3A,00,9D,3C,18,05,3A,00,9D,3C,3C,32,00,9E,C9
560 DATA 3E,04,CD,B4,BB,26,05,16,0E,2E,01,1E,01,CD,66,BB,3E,05,CD,90,BB,3E,09,CD
,96,BB,3E,44,CD,5A,BB,3E,65,CD,5A,BB,3E,70,CD,5A,BB,3E,74,CD,5A,BB,3E,68,CD,5A,B
B,3E,80,CD,5A,BB,3E,8F,CD,5A,BB,18,01
570 DATA F1,CD,06,BB,F5,4F,3E,38,91,E6,F8,20,F3,3E,07,CD,6F,BB,3E,01,CD,72,BB,F1
,CD,5A,BB,D6,30,32,DC,85,3E,8F,CD,5A,BB,3E,12,CD,1E,BB,28,F9,C9
580 DATA 3E,00,06,0C,0E,0C,CD,32,BC,3E,01,06,19,0E,19,CD,32,BC,3E,03,06,03,0E,03
,CD,32,BC,3E,07,06,07,0E,07,CD,32,BC,3E,0B,06,1A,0E,1A,CD,32,BC,06,00,0E,00,CD,3
8,BC,3E,09,CD,96,BB,CD,6C,BB,C9,11,24,02,21,36,00,CD,C3,BB,C9
590 DATA 3E,00,32,1A,80,11,EC,00,21,60,AB,CD,AB,BB,C9,21,73,83,06,10,3E,1A,77,23
,10,FA,C9,3E,12,32,00,9D,3E,16,32,01,9D,C9,3E,01,32,01,9E,3E,02,32,02,9E,3E,03,3
2,03,9E,C9,21,7A,AB,06,06,3E,00,77,23,10,FA,C9
600 DATA 3A,01,9E,3C,32,01,9E,3A,02,9E,3C,32,02,9E,3A,03,9E,3C,32,03,9E,C9
610 FOR oo=&9E05 TO &9F12
620 READ gg$
```

```
630 POKE oo,VAL("&"+gg$)
640 NEXT oo
650 DATA 3E,0B,CD,90,BB,3E,09,CD,96,BB,3A,00,9E,CD,6F,BB,3A,01,9E,CD,72,BB,3E,FD
,CD,5A,BB,3A,00,9E,CD,6F,BB,3A,02,9E,CD,72,BB,3E,FC,CD,5A,BB,3A,00,9E,CD,6F,BB,3
A,03,9E,CD,72,BB,3E,FB,CD,5A,BB,C9
660 DATA 3E,0B,CD,90,BB,3E,09,CD,96,BB,3A,00,9E,CD,6F,BB,3A,01,9E,CD,72,BB,3E,FA
,CD,5A,BB,3A,00,9E,CD,6F,BB,3A,02,9E,CD,72,BB,3E,F9,CD,5A,BB,3A,00,9E,CD,6F,BB,3
A,03,9E,CD,72,BB,3E,F8,CD,5A,BB,C9
670 DATA 3E,0B,CD,90,BB,3E,09,CD,96,BB,3A,00,9E,CD,6F,BB,3A,01,9E,CD,72,BB,3E,F7
,CD,5A,BB,3A,00,9E,CD,6F,BB,3A,02,9E,CD,72,BB,3E,F6,CD,5A,BB,3A,00,9E,CD,6F,BB,3
A,03,9E,CD,72,BB,3E,F5,CD,5A,BB,C9
680 DATA 3A,03,9E,3C,21,04,9E,BE,28,0C,3E,0B,CD,90,BB,3E,09,CD,96,BB,18,0A,3E,04
,CD,90,BB,3E,09,CD,96,BB
690 DATA 3A,00,9E,CD,6F,BB,3A,01,9E,CD,72,BB,3E,80,CD,5A,BB,3A,00,9E,CD,6F,BB,3A
,02,9E,CD,72,BB,3E,FF,CD,5A,BB,3A,00,9E,CD,6F,BB,3A,03,9E,CD,72,BB,3E,FE,CD,5A,B
B,C9
700 FOR pp=&9941 TO &9CFF
710 READ hh$
720 POKE pp,VAL("&"+hh$)
730 NEXT pp
740 FOR qq=&9D02 TO &9DFF
750 READ ii$
760 POKE qq,VAL("&"+ii$)
770 NEXT qq
780 RESTORE
790 DATA C9
800 DATA 3E,01,CD,1E,BB,28,05,CD,5E,99,18,0F,3E,08,CD,1E,BB,28,05,CD,09,9A,18,03
,CD,44,80,C9
810 DATA 3A,00,9D,FE,13,28,35,3A,05,80,FE,02,20,03,CD,41,81,3A,01,9D,FE,16,20,0B
,11,20,00,21,C0,FF,CD,C3,BB,18,1B,11,20,00,21,C0,FF,CD,F3,BB,E6,04,20,0E,11,E0,F
F,21,40,00,CD,C3,BB,CD,3A,80,18,6C
820 DATA 11,00,00,21,20,00,CD,F3,BB,F5,FE,09,20,06,CD,B4,9A,F1,18,58,F1,FE,0B,20
,0E,11,E0,FF,21,20,20,CD,C3,BB,CD,30,80,18,45
830 DATA 11,00,00,21,20,00,CD,F3,BB,F5,FE,09,20,06,CD,48,9B,F1,18,31,F1,FE,0B,20
,0E,11,E0,FF,21,00,00,CD,C3,BB,CD,30,80,18,1E
840 DATA 11,00,00,21,20,00,CD,F3,BB,FE,09,20,05,CD,CC,9B,18,0C,11,E0,FF,21,E0,FF
,CD,C3,BB,CD,30,80,C9
850 DATA 3A,00,9D,FE,02,28,35,3A,05,80,FE,01,20,03,CD,8D,81,3A,01,9D,FE,16,20,0B
,11,E0,FF,21,C0,FF,CD,C3,BB,18,1B,11,E0,FF,21,C0,FF,CD,F3,BB,E6,04,20,0E,11,20,0
0,21,40,00,CD,C3,BB,CD,3A,80,18,6C
860 DATA 11,00,00,21,20,00,CD,F3,BB,F5,FE,09,20,06,CD,FE,9A,F1,18,58,F1,FE,0B,20
,0E,11,20,00,21,20,20,CD,C3,BB,CD,30,80,18,45
870 DATA 11,00,00,21,20,00,CD,F3,BB,F5,FE,09,20,06,CD,8A,9B,F1,18,31,F1,FE,0B,20
,0E,11,20,00,21,00,00,CD,C3,BB,CD,30,80,18,1E
880 DATA 11,00,00,21,20,00,CD,F3,BB,FE,09,20,05,CD,13,9C,18,0C,11,20,00,21,E0,FF
,CD,C3,BB,CD,30,80,C9
890 DATA 3A,00,9D,CD,6F,BB,3A,01,9D,CD,72,BB,3E,80,CD,5A,BB,3A,00,9D,CD,6F,BB,3A
,01,9D,3C,CD,72,BB,3E,80,CD,5A,BB
900 DATA 3A,00,9D,3C,32,00,9D,3A,01,9D,3C,3C,32,01,9D,3A,00,9D,CD,6F,BB,3A,01,9D
,CD,72,BB,CD,EA,80,3E,01,32,1B,80,CD,26,80,C9
910 DATA 3A,00,9D,CD,6F,BB,3A,01,9D,CD,72,BB,3E,80,CD,5A,BB,3A,00,9D,CD,6F,BB,3A
,01,9D,3C,CD,72,BB,3E,80,CD,5A,BB
920 DATA 3A,00,9D,3D,32,00,9D,3A,01,9D,3C,3C,32,01,9D,3A,00,9D,CD,6F,BB,3A,01,9D
,CD,72,BB,CD,9C,80,3E,01,32,1B,80,CD,26,80,C9
930 DATA 3A,00,9D,CD,6F,BB,3A,01,9D,CD,72,BB,3E,80,CD,5A,BB,3A,00,9D,CD,6F,BB,3A
,01,9D,3C,CD,72,BB,3E,80,CD,5A,BB
940 DATA 3A,00,9D,3C,32,00,9D,3A,00,9D,CD,6F,BB,3A,01,9D,CD,72,BB,CD,EA,80,3E,01
,32,1B,80,CD,1C,80,C9
950 DATA 3A,00,9D,CD,6F,BB,3A,01,9D,CD,72,BB,3E,80,CD,5A,BB,3A,00,9D,CD,6F,BB,3A
,01,9D,3C,CD,72,BB,3E,80,CD,5A,BB
960 DATA 3A,00,9D,3D,32,00,9D,3A,00,9D,CD,6F,BB,3A,01,9D,CD,72,BB,CD,9C,80,3E,01
,32,1B,80,CD,1C,80,C9
970 DATA 3A,00,9D,CD,6F,BB,3A,01,9D,CD,72,BB,3E,80,CD,5A,BB,3A,00,9D,CD,6F,BB,3A
,01,9D,3C,CD,72,BB,3E,80,CD,5A,BB
980 DATA 3A,00,9D,3C,32,00,9D,3A,01,9D,3D,3D,32,01,9D,3A,00,9D,CD,6F,BB,3A,01,9D
,CD,72,BB,CD,EA,80,3E,01,32,1B,80,C9
990 DATA 3A,00,9D,CD,6F,BB,3A,01,9D,CD,72,BB,3E,80,CD,5A,BB,3A,00,9D,CD,6F,BB,3A
,01,9D,3C,CD,72,BB,3E,80,CD,5A,BB
1000 DATA 3A,00,9D,3D,32,00,9D,3A,01,9D,3D,3D,32,01,9D,3A,00,9D,CD,6F,BB,3A,01,9
D,CD,72,BB,CD,9C,80,3E,01,32,1B,80,C9
1010 DATA 3E,02,32,1A,80
1020 DATA 11,00,00,21,20,00,CD,C3,BB,3A,01,9D,3D,3D,32,01,9D,3E,09,CD,96,BB,3A,0
0,9D,CD,6F,BB,3A,01,9D,3C,3C,3C,CD,72,BB,3E,80,CD,5A,BB,3E,07,CD,90,BB,3A,00,9D,
CD,6F,BB,3A,01,9D,3C,3C,CD,72,BB
1030 DATA 3E,F0,CD,5A,BB,3E,03,CD,90,BB,3A,00,9D,CD,6F,BB,3A,01,9D,CD,72,BB,3E,F
```

```
2,CD,5A,BB,3A,00,9D,CD,6F,BB,3A,01,9D,3C,CD,72,BB,3E,F1,CD,5A,BB,18,02,18,9B,3E,
01,CD,DE,BB,11,00,00,21,00,00,CD
1040 DATA ED,BB,3E,01,32,06,80,21,06,80,CD,AA,BC,21,00,40,2B,7C,FE,00,20,FA,11,0
0,00,21,20,00,CD,C3,BB,3A,01,9D,FE,02,20,CC,C9
1050 DATA 3E,01,32,1A,80
1060 DATA 11,14,00,21,20,00,CD,C3,BB,3A,01,9D,3D,3D,32,01,9D,3E,09,CD,96,BB,3A,0
0,9D,CD,6F,BB,3A,01,9D,3C,3C,3C,CD,72,BB,3E,80,CD,5A,BB,3E,07,CD,90,BB,3A,00,9D,
CD,6F,BB,3A,01,9D,3C,3C,CD,72,BB
1070 DATA 3E,EF,CD,5A,BB,3E,03,CD,90,BB,3A,00,9D,CD,6F,BB,3A,01,9D,CD,72,BB,3E,F
4,CD,5A,BB,3A,00,9D,CD,6F,BB,3A,01,9D,3C,CD,72,BB,3E,F3,CD,5A,BB,18,02,18,9B,3E,
01,CD,DE,BB,11,00,00,21,00,00,CD
1080 DATA ED,BB,3E,01,32,06,80,21,06,80,CD,AA,BC,21,00,40,2B,7C,FE,00,20,FA,11,0
0,00,21,20,00,CD,C3,BB,3A,01,9D,FE,02,20,CC,C9
1090 DATA 3A,01,9D,3C,3C,3C,3C,3C,3C,21,04,9E,BE,28,2D,3A,01,9D,3C,3C,3C,3C,21,0
4,9E,BE,28,20,3A,01,9D,3C,3C,21,04,9E,BE,28,15,3A,01,9D,21,04,9E,BE,28,0C,3A,01,
9D,21,04,9E,BE,E6,80,28,01,C9,3A,00,9D,FE,02,20,04,CD,5A,9C,C9,3A,00,9D,FE,13,20
,03,CD,02,9D,C9
1100 DATA 3E,00,CD,0E,BC,C9
1110 CALL &9DFA : CALL &890E
1120 CALL &88C7
1130 CALL &87BC
1140 CALL &885B
1150 height=PEEK(&85DC) : PRINT CHR$(21) : LOCATE 3,1 : PRINT PEEK(&85DC) : PRIN
T CHR$(6)
1160 CALL &872E
1170 CALL &852D
1180 CALL &85DD
1190 CALL &86B5
1200 CALL &8649
1210 CALL &86D6
1220 CALL &8904
1230 CALL &8929 : CALL &8093
1240 CALL &891D
1250 c=2 : d=3
1260 CALL &8934
1270 CALL &87DA : a=PEEK(&9E00) : PRINT CHR$(21) : LOCATE 3,1 : PRINT PEEK(&9E00
) : PRINT CHR$(6)
1280 CALL &8944 : CALL &9DA8
1290 face=PEEK(&801A) : PRINT CHR$(21) : LOCATE 3,1 : PRINT PEEK(&801A) : PRINT
CHR$(6)
1300 IF face=1 OR face=2 GOTO 1500
1310 CALL &9941 : CALL &9942 : CALL &8062 : apos=PEEK(&9D00) : bpos=PEEK(&9D01)
: PRINT CHR$(21) : LOCATE 3,1 : PRINT PEEK(&9D00) : PRINT PEEK(&9D01) : PRINT CH
R$(6)
1320 IF a<3 OR a>18 GOTO 1270
1330 CALL &8443
1340 xstop=PEEK(&9E04) : PRINT CHR$(21) : LOCATE 3,1 : PRINT PEEK(&9E04) : PRINT
 CHR$(6)
1350 IF xstop<0 OR xstop>255 GOTO 1360
1360 IF xstop<22-height*2 OR xstop>26 GOTO 1250
1370 CALL &9E05
1380 CALL &9941 : CALL &9942 : CALL &804E
1390 CALL &9E43
1400 CALL &9941 : CALL &9942 : CALL &804E
1410 CALL &9E81
1420 CALL &9941 : CALL &9942 : CALL &804E : apos=PEEK(&9D00) : bpos=PEEK(&9D01)
: PRINT CHR$(21) : LOCATE 3,1 : PRINT PEEK(&9D00) : PRINT PEEK(&9D01) : PRINT CH
R$(6)
1430 CALL &9EBF
1440 IF a=apos AND c=bpos GOTO 1480
1450 looking=PEEK(&8005) : PRINT CHR$(21) : LOCATE 3,1 : PRINT PEEK(&8005) : PRI
NT CHR$(6)
1460 CALL &84F3
1470 CALL &9941 : CALL &9942 : CALL &8058 : apos=PEEK(&9D00) : bpos=PEEK(&9D01)
: PRINT CHR$(21) : LOCATE 3,1 : PRINT PEEK(&9D00) : PRINT PEEK(&9D01) : PRINT CH
R$(6)
1480 CALL &8514
1490 IF a=apos AND c=bpos GOTO 1500 ELSE 1520
1500 CALL &86F7
1510 GOTO 1110
1520 c=c+1 : d=d+1
1530 CALL &8950
1540 IF d<xstop GOTO 1370 ELSE 1250
```

DISCOUNT
From MJ(

DISC GAMES

MJC SPECIAL
DOUBLE DRAGON 2
RRP £14.95 OUR PRICE £9.95
Offer ends May 31, 1990

After the War	**10.95**
Batman The Movie	**10.95**
Beverley Hills Cop	**10.95**
Carrier Command	**12.95**
Chase HQ	**10.95**
Doctor Dooms Revenge	**10.95**
Ghostbusters 2	**10.95**
Gazza's Super Soccer	**10.95**
Hard Drivin'	**10.95**
Jack Niklaus Golf	**12.95**
Kick Off	**10.95**
Knight Force	**10.95**
Operation Thunderbolt	**10.95**
Powerdrift	**10.95**
Purple Saturn Day	**10.95**
Robocop	**10.95**
Scrabble Deluxe *(6128)*	**10.95**
Shinobi	**10.95**
Snoopy	**10.95**
Star Wars Trilogy	**14.95**
Super Wonderboy	**10.95**
Tolkein Trilogy	**12.95**
Turbo Outrun	**10.95**
Black Tiger	**10.95**
Cyeberworld	**10.95**
Dan Dare 3	**10.95**
Emotion	**10.95**
Ninja Spirit	**10.95**
P-47 Thunderbolt	**10.95**
Rainbow Islands	**10.95**
Sonic Boom	**10.95**
Space Harrier 2	**10.95**
X-Cell	**10.95**

EDUCATIONAL

Animal, Mineral, Vegetable	11.95
World Wise	11.95
Learn to read with Prof (4-9)	17.95
Answerback Junior Quiz	**11.95**
Factfile's *(require Answerback Quiz)*	
Arithmetic *(6-11 years)*	7.95
Spelling *(6-11 years)*	7.95
Sports *(6-11 years)*	7.95
Fun School 1 *10 programs per disc*	
For 2-5 years	7.95
For 5-8 years	7.95
For 8-12 years	7.95
Fun School 2 *8 programs per disc*	
For 2-6 years	9.95
For 6-8 years	9.95
For 8-12 years	9.95
French Mistress *(12-adult)*	**15.95**
German Master	15.95
Spanish Tutor	15.95
Italian Tutor	15.95

MINI OFFICE 2

Database Software's great value-for-money package continues to be one of our best sellers, and is the ideal introduction to serious software. Contains Word Processor, Database, Spreadsheet, Graphs and Communication programs.

DISC RRP	**£19.95**
OUR PRICE	**£13.95**
CASSETTE	**£14.95**
OUR PRICE	**£ 9.95**

WHILE STOCKS LAST

DISC SERIOUS

see also CPM based and Mini Office 3 boxes

Protext	**17.95**
Prospell	16.95
Promerge	16.95
Maxam (Assembler)	18.95
Tasword 6128	**23.95**
Tasword 464-D	23.95
Taspell	14.95
Tasprint	11.95
Tascopy	11.95
Tasdiary	11.95
Tas-sign (6128 only)	23.95
Tas-sign extra fonts	10.95
Qualitas Plus v2	**14.95**
Qualitas Font Library	11.95
Qualitas CPM+ Utilities	8.95
Masterfile 3	29.95
Mastercalc 128	25.95
Matrix Spreadsheet Plus	29.95
Stockmarket (Share Analysis)	25.95
Advanced OCP Art Studio	19.95
Stop Press Desktop Publishing	34.95
Extra Extra (for Stop Press)	19.95
X-Press 1.3 (for Stop Press)	18.95
Sprites alive	18.95
Sprites alive compiler	24.95

ROM BASED

NB: A ROM board, such as ROMBO, is required to use any of these ROMs

Rombo (ordered on it's own)	**31.95**
Rombo (if purchased with ROM)	28.95
Protext	27.95
Prospell	22.95
NB: Dictionary is supplied on disc	
Promerge Plus	22.95
Maxam	27.95
Maxam 1.5	20.95
NB: Although Maxam 1.5 has extra features, you must have Protext on ROM to use it	
Utopia	20.95
BCPL	21.95

Overseas Orders Welcome – Please write for details

WE ARE NOW IN OUR FIFTH YEAR OF SPECIALISING IN AMSTRAD MAIL ORDER, OUR POLICY IS TO PROVIDE THE WIDEST RANGE AT DISCOUNT PRICES WITH A FAST TURN AROUND TIME – TRY OUR SERVICES WITH CONFIDENCE

Callers Welcome: Mon–Fri, 9 to 5, Sat 10 to 4

VISA

PLEASE SEND CHEQUES/POs TO:

M.J.C. SUPPLIES, (DPS)

40a Queen Street, Hitchin, Herts SG4 9TS

PROPRIETOR: M. J. COOPER

MINI OFFICE 3

Okay, so it doesn't really exist, but what do you do when you've outgrown Mini Office 2? We give our recommendations for the best packages most CPC owners to replace each module. Please note ROM versions require a suitable ROM board, such as the ROMBO.

PROTEXT – Word Processing
Disc £17.95, ROM £27.95

The WP program for people who want to process words quickly and efficiently. Allows several different ruler lines per document, (stored with the file), normal tabs, and decimal tabs for columns of numbers. Commands have been kept as logical as possible, for example, to format a paragraph you press CTRL-F, to switch justification CTRL-J. Our favourite on any machine. Disc version allows files up to 26k (about eight pages), ROM version allows 40k.

PROMERGE – Mail Merge
Disc £16.95, ROM £22.95

This is the program which allows you to take a file of data (created from Masterfile, written directly in Protext, or entered at the keyboard during print run) and 'fill in the blanks' on a standard letter wirtten within Protext, automatically re-formatting as it goes. It actually goes beyond that. The ROM version on a 6128 also allows two files to be stored in memory so you can switch between them and copy blocks of text over.

MASTERFILE 3 – Database
Disc only £29.95

For 128k machines only as it uses second 64k of memory for data storage, so is very quick at searching. Unlike most of it's competitors, you never need specify a field length, and it only stores the characters you've used. This means about 1,000 names and addresses can be stored in one file. Flexible layout options give many ways of displaying and printing the information stored. Advanced users will find it's parent/child data linking saves even more space when the same data is used in several records.

MATRIX – Spreadsheet
Disc £29.95

One of the nicest programs to use we've come across on any computer, Matrix has excellent editing features and the ability to sort whole blocks of the spreadsheet in to order either numerically or alphabetically on any row or column you specify. Output to printer, or to disc to enable you to load into your wp program for final editing and amendment, or even to include blocks of figures within reports. Also has graphics features for pie charts, bar charts and line graphs. Features a pop-up calculator and a notepad, which allows brief documents to be created without leaving the program.

These programs give you everything Mini Office 2 can offer and more. But there's no reason to stop there. The following programs offer whole new areas MO2 doesn't even think about. See also the Printing box elsewhere in this advert.

PROSPELL – Spell-Checking
Disc £16.95, ROM £22.95
Dictionary supplied on disc

Each word in your document is compared with a 30,000 word dictionary, and if it's not in there it will highlight it so you may correct it, ignore it, or add it to the dictionary. New words can be added and whole new dictionaries created. Find words and anagram features will be a boon to crossword players!

UTOPIA – Utilities
ROM only £20.95

This 16k ROM is packed with useful routines which mean you can format, copy or verify discs, copy, rename, or erase files, save blocks of memory in Hex or as ASACII, display files on screen, find and replace variables in files, echo screen output to printer and much more all without leaving Basic, Protext or Masterfile. Never again need you lose valuable data or documents because you ran out of disc space before saving!

SOFTWARE

C Supplies

PRINTED OUTPUT

IMPROVED TEXT QUALITAS PLUS V.2

One of the most useful utilities for 9 pin printer owners, this program prints almost 24 pin quality text in a choice of fonts from any Epson compatible capable of quad density graphics including the Amstrad DMP range. Works from within Mini Office 2, Masterfile 3, Protex (with or without it's add-ons), Tasword or even from Basic. Matrix users will need to print to file then load into one of the WP programs. Qualitas Plus version 2 is supplied with 5 business type fonts for use with or without the KDS 8-bit printer port. The Qualitas Font Library gives 8-bit port owners a further 30 fonts to choose from, comprising business, decorative and italics as well as some foreign and mathematical symobls. The CPM+ Utilities Disc allows Qualitas to be used with Protext CPM and other CPM+ programs.

Qualitas Plus v2	14.95
Qualitas Font Library	11.95
KDS 8-Bit Printer Port	18.95
CPM+ Utilities Disc	8.95

QUALIPACK EXTRA

comprising Qualitas Plus v2
KDS 8-bit Printer Port
and Qualitas Font Library
£41.50

PRINT COLOUR GRAPHICS COLOURDUMP 2

'Many people have been trying to print colour graphics on a Star LC-10 Colour Printer for some time, with little success (are you reading, David Dorn?). Regular readers have by now found Colourdump 2, exclusively available from MJC Supplies. This stand-alone utility program takes a standard 17k screen file created with Advanced OCP Art Studio, AMX Art program, or from within Basic and asks you which of the 26 palette colours you wish to assign to each of the 16 inks available in mode 0, or 4 in mode 1, and then prints out an up to 16 colour 135 x 95 mm double density picture. We can now also supply 4 colour heat transfer ribbons which allow you to print your colour image onto plain paper and then iron onto cloth for customised t-shirts! Although best results are obtained with the Star Colour printer, ColourDump 2 will work on any 9 pin dot matrix printer, but you will need to buy several different coloured ribbons.

ColourDump 2	**12.95**
Advanced OCP Art Studio	19.95
Star LC10 Colour	**229.95**
Star 4 colour ribbon	5.95
or two for	11.00
Heat transfer ribbon	19.95

NB: Each heat transfer ribbon should produce about 15 ColourDump images and are for Star LC10 Colour only.

PRINTERS

All printers listed are Epson compatible and suitable for use with any Amstrad CPC (and most other) computers, although we do ask you to call before ordering Colour or 24-pin printers for specific information. All feature friction feed for single sheet and tractor feed for continuous paper. All these prices include VAT, ribbon, and free connecting cable. Despatch is by Royal Mail Insured Parcel (at no charge) for which you should allow 7 to 10 days. A 2-day courier service is available. All printers carry a 12 month on site repair warranty free of charge.

Add £5 for courier despatch, and £5 for 'call out' warranty.

CITIZEN 120-D

The cheapest printer in our range offers all the features of the Amstrad CMP2160 but is better built and £20 cheaper. Offers a good range of character widths and effects in draft mode. Near Letter Quality mode available but not in all sizes and effects.

£139.95

STAR LC-10 Mark 1

As well built and reliable as the Panasonic, the Star LC-10 range offer features not found on many more expensive machines. NLQ is offered in all sizes and effects, including double height in not one, but four different fonts. All character widths and fonts are selectable from software or from the printers control panel. Paper Park function allows single sheets to be used without disconnecting continuous paper. Even includes a three pin plug!

£179.95

STAR LC-10 Mark 2

Offers all the features of the Mark 1, but is 25% faster, a considerable improvement. If your budget will reach it, it is highly recommended!

£199.95

PANASONIC KXP-1081

Exactly the same price as the DMP 2160, but built to last and offering not only a better NLQ print quality but all sizes and effects are available. NLQ and Compressed mode selectable from software or from printer control switch. The starting point for all but the most budget conscious!

£159.95

STAR LC-10 COLOUR

As a mono printer the LC-10 Colour is identical to the Mark 1, but features a four colour ribbon which allows seven basic text colours to be printed out from your word processing software. With Colourdump 2 all 26 palette colours from your Amstrad can be duplicated for graphics printing. Please call for advise before ordering.

£229.95

24-PIN PRINTERS

We stock three 24 pin printers, the Star LC24-10 at £259.95, the Panasonic KXP-1124 at £299.95 and the Citizen Swift 24 at £359.95. Please call for advice and specifications before ordering.

CPM BASED

MJC SPECIAL PROTEXT CPM
OUR PRICE JUST £39.95

At Last Plus	29.95
SuperCalc 2	55.95
Arnor C Complier	39.95
Maxam 2	39.95
Nevada Cobol	39.95
Hisoft C	39.95
Devpac 80 version 2	39.95
Pascal 80	39.95
Iankey Crash Course Typing	19.95
Iankey Two Finger Typing	19.95
Knife Plus	18.95
Nevada Fortran	39.95

RIBBONS

PRINTER	QUANTITY 1	2	5
DMP 2000/2160	3.50	6.00	14.00
Panasonic 1081	3.95	7.00	15.00
Citizen 120-D	3.95	7.00	15.00
Star LC-10 Black	3.95	7.00	15.00
Star LC-10 Colour	5.95	11.00	
Heat Transfer Ribbons			
Citizen 120-D	12.95	25.00	
Star LC-10 Mono	13.95	27.00	
Star LC-10 Colour	19.95	37.50	

CORNIX SOFTWARE

SIMPLE ACCOUNTS

Designed to be easy to use for those with little or no knowledge of computers or accounts. VAT returns, sales and purchases under up to 20 user defined classifications.

CASSETTE: £34.95
DISC: £39.95

JOB ESTIMATOR

Aimed at the small contractor who needs to provide estimates quickly and neatly. Ideal for small builders, brick layers, plasterers, etc.

DISC ONLY: £39.95

PRODUCT COSTING

Similar to Job Estimator but aimed at manufacturers or those producing a product for sale.

DISC ONLY: £39.95

CARD INDEX

An easy to use card index type data retrieval program. Ideal for basic database requirements.

CASSETTE: £19.95
DISC: £24.95

Full specifications of all Cornix products available free of charge upon request.

NEW PRODUCTS TO MJC
X-PRESS 1.3

Excellent utility for Stop Press owners. Print pages four times faster, compact pages on disc, up to 8-page background printing, 5 print modes, view pages from disc.

£18.95

SPRITES ALIVE!

Adds 10p commands designed to help you write games from Basic. Features up to 64 sprites, sprite design, movement and collision detection. Works in Modes 0 or 1.

£18.95

BLANK DISCS

Maxell CF2 Discs
5 for £12.00
10 for £21.95

Amsfot CF2 Discs
5 for £13.00
10 for £23.95

ACCESSORIES

DKT 64K memory expansion	45.95
Multiface 2+	42.95
Amstrad RS232 interface	55.95
KDS 8 bit printer port	18.95
CPC printer lead 1 metre	8.95
CPC printer lead 1.5 metre	9.95
CPC printer lead 2 metre	10.95
464 Keyboard/Monitor ext leads	6.95
6128 Keyboard/Monitor ext leads	7.95
FD1 2nd disc drive lead	7.95
6128 Cassette lead	4.95
464 Dust cover (state col/mono)	7.95
6128 Dust cover (state col/mono)	7.95
CPC mono screen filter	12.95
CPC colour screen filter	14.95
3" Disc drive head cleaner	6.95
1000 Fanfold address labels	6.95
Quickshot 2 Turbo joystick	9.95
Cheetah 125+ joystick	7.95
Competition Pro 5000 joystick	13.95
Cruiser joystick	9.95

NB: We regret that due to supply problems Database Software are unable to supply any AMX Mice at present. This situation is not expected to improve until June.

MJC SUPPLIES (DPS)

ORDER BY ACCESS OR VISA ON (0462) 432897, 420847 OR 421415

A funny kind of logic

David Dorn, erstwhile teacher, continues an in-depth study of educational software for the CPC with a long look at a chart-topping package from Database Software.

Last month, ACU looked at the ethos and aims of educational software – at least in some part – and the features that should characterise the good examples of the art. Over a period of some years, since 1984, in fact, I've had the opportunity to examine a great deal of educational software, use it with kids of all ages and abilities, and assess its merit, as a professional teacher.

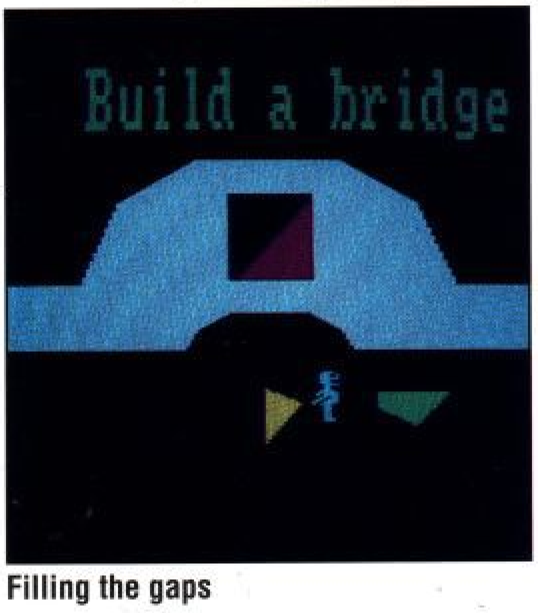
One suite of programs has stood out head and shoulders above a seething mass as far as general educational content, presentation, and value for money are concerned, and that's the Database Fun School 2 series. Some time ago, I had the pleasure of reviewing the first two discs in the series for ACU, and was able to heartily recommend them to teachers and parents alike.

This month, it's the turn of the third disc in the series, for the over 8s. As you may recall, I was enthusiastic about the compilations for the younger children, but by the time they reach junior school age, they need more of a challenge. Fun School 2 goes some way to providing this challenge.

The compilation takes the form of a large puzzle, with seven sub-puzzles to be solved before the main one can be attempted. The sub-puzzles are educational games in their own right, but give keywords necessary for the completion of the final, eighth game when their first levels have been mastered. Children may attempt the shorter puzzles in any order, and at the level set for them by their teacher or parent. The only provision is that they make a note of the keywords as they reveal them. In fact, that is one of the key points of this compilation; the child using it will need to make notes and maps.

There are those who would say that this is not a good thing, but you won't





Filling the gaps

find me amongst them. I feel that it is a good idea to combine traditional methodology with up-to-date computing methods. So, I was pleased to see a group approach to the solution of the main problem being advocated in the manual that accompanies the package. It suggests that a teacher might like to divide a class into seven or eight groups, each of which is responsible for finding one keyword, and reporting back to either the class as a whole, or to the eighth group, for the whole puzzle to be solved.

This is a very sound approach, and one I would pursue in the classroom. But to the games themselves!

Build a Bridge

There is a gap in a bridge, which must be filled by manoeuvring coloured shapes into it. Like Packing from the middle disc, in later levels shapes may have to be rotated to fit the gap. In fact this is very much an extension of the earlier game, which lends towards the continuity through the series.



Passage of Guardians

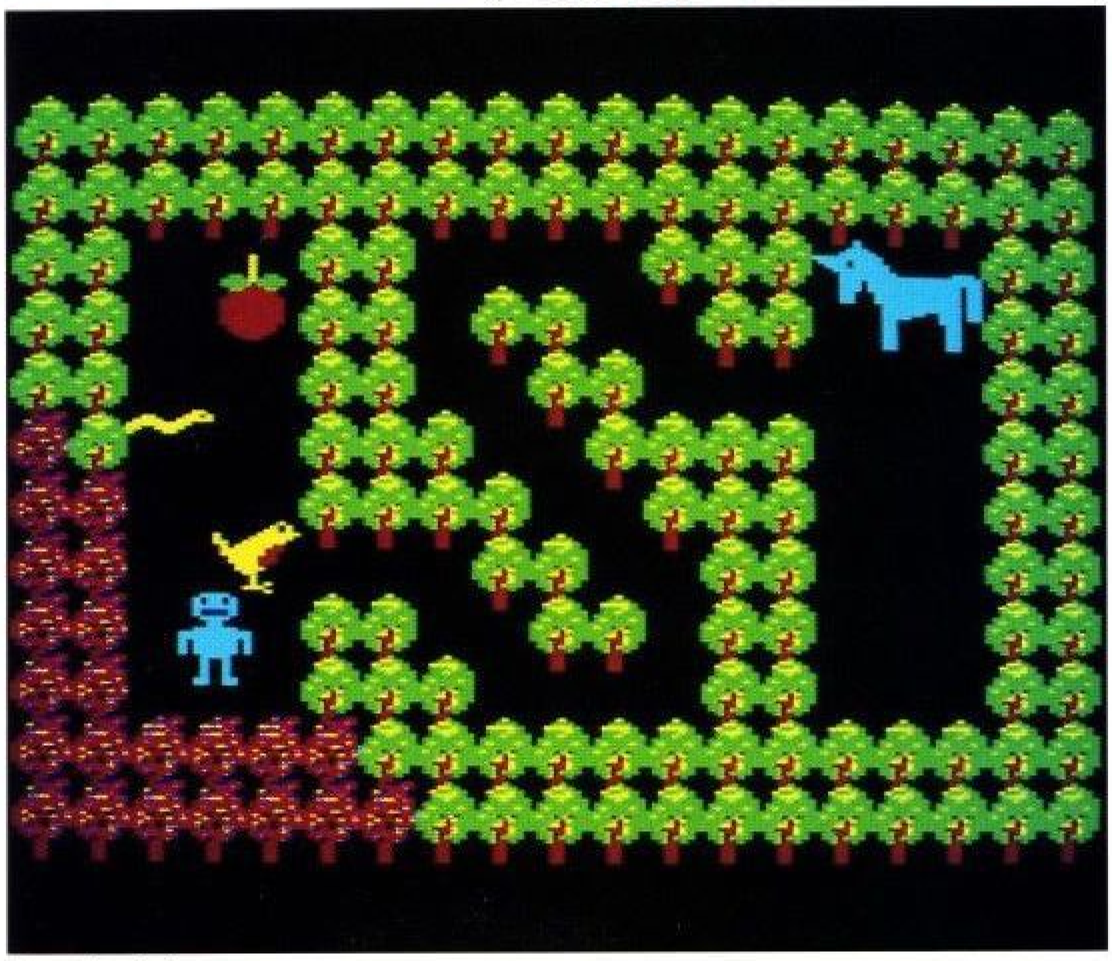
The aim of this game is to guide the robot through a simple maze, past the Robot Guardians. Bumping into one of these massive yellow hulks (which is completely unavoidable) causes an anagram to appear, which must be solved to get past. The words may repeat in one run, but are well chosen and pertinent to the child.

Unicorn Quest

This is a variation of the old game 'Dog Duck Corn' in which the three protagonists – in this case a bird, worm and apple – have to be ferried to the other end of a maze before the forest is burned down. The unicorn is then saved from an early extinction. The varying levels in this game are distinguished only by the time allowed to complete the task. This isn't my favourite, but it has its merits as a reward game.

Logic Doors

The keyword in this game is hidden in a room which is part of a maze. Each



Save the Unicorn



Picking up souvenirs

room has a different coloured door, which can be entered without a key in level one. In subsequent levels, you must be in possession of the correct key (or keys) to open the door. It is vital that the child maps the maze, or he/she could end up wandering for some time. This definitely lends itself to group activity, and could be the stimulus for creative writing, drama etc. Excellent.

Souvenirs

The child is presented with a map of Europe, which has a number of countries flagged. The aim is to visit each country once only, and buy a souvenir. The child starts with a limited amount of money, and must budget to complete the trip. Also, the route must be planned so that a return to the good old UK is possible. Again, this lends itself to group activity, and could be the basis of much more work in various areas of the curriculum.

Code Boxes

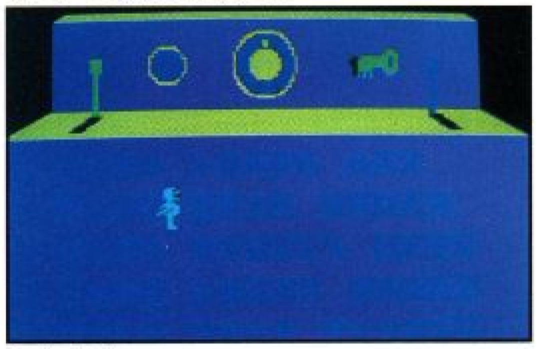
The child has to open a box, but cannot do so until he types the number of objects it contains. The number is shown on the outside of the box, but in code. No, I'm not going to tell you what the code is, but Frank Bruno would find it a bin 'arry! (urgh!)

Mystery Machine

This one is my favourite! The child is presented with a machine which he has to operate to get the keyword. There are instructions on how to operate the machine, but coded. The aim is to break the code, and it is beautifully implemented. This again would be a good stimulus for further work.

The major puzzle is called Escape, and is very similar to Logic Doors, except that at certain points the child(ren) come across obstacles that need a particular keyword to be used in order to pass. Each keyword can be used only once in an attempt to escape. This game draws all the others together in a way that I've not seen done before on the CPC in an educational context, and must be a great stimulus for the completion of the other seven.

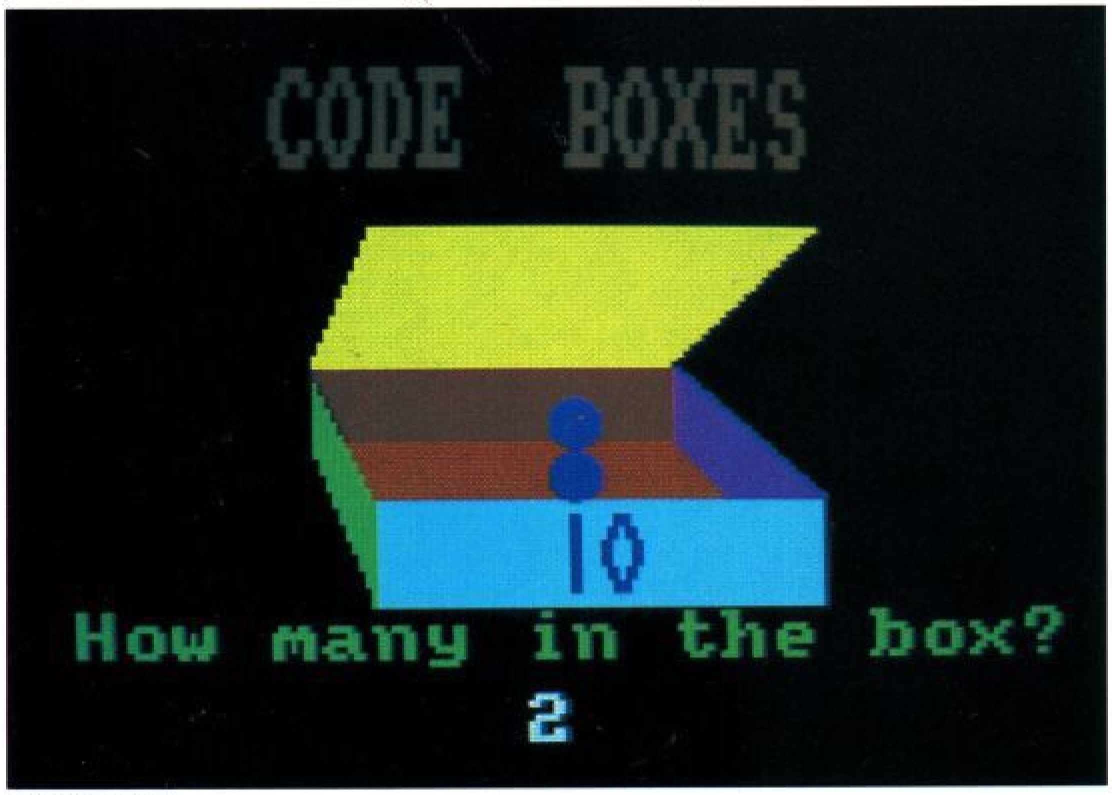
As a teacher (lapsed!) I can only applaud the concept behind the compilation, and indeed the series as a whole. It confirms my belief that the CPC is a valid and excellent educational tool, and can be used to stimulate all manner of other activities in both the classroom and the home. If you have children of primary school age, or teach them, you really ought to have a look at the Fun School 2 series. They're worth their weight in gold!



Coded clues

Hmm, that was rather a departure from what was planned for this instalment of the education mini series, and fair enough. As far as the CPC is concerned, and the education of our children – or aiding of it – is concerned, a single article is no way to do it justice. So, after consultation with the editor, I propose to take a rather more in-depth look at the available software than we'd originally intended.

At the end of it, you should be in a position to make an informed purchase and, be as sure as you can be that the software you buy will be suitable for your child's age and ability. The criteria will remain the same as I set out in last month's article, and you, as parents and teachers, may be assured that I'll be looking at what's on the market from the viewpoint of a professional educationalist. In the meantime, I'd like to take the opportunity to reiterate that I'd appreciate input from you – your experience and opinions of educational software, and any educational uses of 'mainstream' applications and games that you may have discovered.



Binary boxes

Common Courtesy

Gordon Bates lays down some guidelines about Bulletin Board etiquette.

Last month, we looked at how to log on to Focal Point and considered the messaging facilities, and I'm pleased to say that there are loads of you actually using the system. Saint Dorn tells me that he's put a full user manual up there online for you to download, which is a damned good thing – it's not really necessary, but it's handy to have around!

However, this month, I want to look at general BBS usage, or how to behave on a system, as well as consider some wider themes on the subject of bulletin boards.

A Sysop's Lament

Firstly, a question! What constitutes a bulletin board? Answer – Lots! Most BBS Systems in this country are run off IBM compatible machines, and have a dedicated phone line to them. They also offer a wide range of baud rates – a typical breakdown could look like this:

Computer – IBM PC compatible – cost approx £2000
Modem – Hayes compatible – cost approx £300
Software – various – cost up to £500
Phone line – costs £100 to install

In the cost of the computer, I've included a good sized hard disc – a BBS can look pretty sick if it's only got a small one., and by small, I mean less than 40 Megabytes. Now, to your average CPC user, 40 Megs sounds an awful lot of space – it represents hordes of 3" single sided discs! But when you consider that the average BBS caters for IBM, CPC, ST, AMIGA Speccies PCW et al, and some of those machines use what seem like ginormous sized programs (usually collections of files, rather than one program – consider CP/M applications), it doesn't take too long to fill 40 Megs.

In fact, Focal Point started with a 32 Megabyte hard disc, which filled within a fortnight! It's now got 100 Megs on tap, and that will probably only last a few months before it's full, so you can see that a B-I-G hard disc is an absolute must if the sysop's serious (and most are.)

So, we're talking about expenditure in the region of two or three thousand pounds to put a fairly average BBS system together – it can be done on a CPC for much less, but with much less spectacular results – more on that in a future column.. The sysop of such a system has other things to consider too.

For a start, he has to commit to spending some time on the system every day that it's running. New users are to be validated, files have to be checked for viruses (something we CPC users thankfully don't have to worry about – yet!), and also see that they're not pirated commercial stuff, and yet again to see that they'll actually work. The messaging areas have to be combed for obscenities, idiocy, and general stupidity, and dubious messages killed.

On top of that, the sysop will have a plentiful supply of messages from his users, each of which needs at least an acknowledgement, if not a reply. If he's lucky, he'll have some sub-sysop running Special Interest Groups (SIGs), and they will take a lot of message answering tasks away from him – much like the mag specifies areas on Focal Point, where Guy and Chris answer mail on the ACU sub-board.

Even so, as you can see, there's a fair amount to be done to keep a good BBS running smoothly – they won't run themselves, no matter how sophisticated the software!

So, how do you, as a user, help out, and get the best from the system? Well, as you'll have seen from the list of tasks earlier, there are some tasks that are just a waste of time for the sysop. He shouldn't NEED to check for viri, obscenities etc.

No need to spell it out, is there? I'm sure that no ACU reader would ever consider sending such things to a BBS anyway, so no more on that. But there are a few ground rules that you ought to bear in mind, and here they are.

1. Consider the other users.



Many BBSs have very extravagant time limits – maybe 2 hours a day. If that's the case, and you use your full allowance during the evening – the most popular time – you may be preventing other users from having access to the system. So, especially if the BBS has only one phone line, be quick , and make the system available to other users.

2. Consider the Sysop.

The sysop has spent a lot of time putting the system together, drawing welcome screens, files areas screens, sourcing PD and shareware software, and making HIS equipment available for YOU to use. So, if you download something, give something back – it doesn't HAVE to be a program you upload. You will be the better thought of if you join in any conferences that are going on – leave some public messages. In other words contribute something for both the sysop and other users to enjoy.

3. Don't complain.

I've seen messages like 'This BBS is absolutely crass – it doesn't support MNP5, and it won't do 450 baud – it's rubbish'. Wow! How ungrateful can you get? Someone has spent ages putting together a system to the best of his/her ability, and made it and their equipment public property, usually for nothing, and some prat has the nerve to put a message like that up! There are more dead BBS because of hate mail like this than I've had hot dinners in a salad bar!

If a BBS is not to your liking, by all means leave a message asking the sysop not to validate you, but don't knock the board. It's someone's baby, and you could easily spoil it for others!

4. Don't be a Nerd!

On odd occasions, I've seen users on a BBS I used to run trying to crash the system, trash the hard disc, alter ANSI

screens, upload Trojans (programs that cause havoc some time later), and generally act like crass idiots. I still don't understand WHY they wanted to do it. At the end of the day, they were welcomed into my home, to use my equipment as they pleased, and share experiences with other people – they had the processing power of a very fast and big machine to play with, and all they wanted to so was cause me problems.

My course of action was to delete their details from the system, blacklist them in software, so they could no longer log-on to the system, and eventually run the board as a private closed system, effectively barring it to new users – which is how it remains to this day.

Chargeable Systems

Those are basic rules of courtesy – I could add these quickies:

Upload something every so often – it doesn't have to be written by you, but can be something you've found on your travels.

The first time you log on to any system, leave a massage of thanks to the sysop, and the sub sysop of any SIG or conference that you visit while you're there.

For goodness sake, log off properly – don't just drop the line on a system – it will recover, but it will take longer to do so than if you logged out correctly. Another user could get the engaged tone while the system is trying to untangle its wires, and not bother trying again.

OK, as we can see, none of the foregoing is anything more than common courtesy, good manners, call it what you will. Unfortunately, and I don't know why, many BBS users seem to be bad mannered troughies (a troughie just logs-on, finds the downloads, and starts sucking files down, without putting anything up, and without leaving any messages).

More and more sysops have begun to combat this by making their systems what I refer to as commercial – they charge a registration fee (this isn't the same as asking for a contribution towards the running costs _ that's an optional thing). Why? because they want to discourage the undesirable element, that's why. Now, I've maintained for years that BBS systems ought to be free to use – that's how they started, and there's a nice feeling to being part of a big family when there's no monetary considerations attached to using a system.

I've found that when money starts changing hands, sysops find themselves being put under the pressure to provide more and more facilities, and begin competing with each other, often ending up with acrimony between various factions, which, I think you'll agree, is a bad thing.

So, to avoid this happening to the uncharged BBS systems around the country (and there are lots of them), follow the guidelines we've looked at in this article. After all, good manners and courtesy cost nothing, and can endear you to a sysop,in no time at all!

Next month, we'll have a look at some of the messaging that's been going on on Focal Point, to give you an idea of what goes on – who knows, if you haven't already got a modem, you might just be persuaded! Take care till then, and enjoy your dialling!

CLIMB ABOARD

SOLID GOLD

After a few temporary hiccups, Focal Point, the best bulletin board John Cook's aunty has ever logged onto, or so he tells us, is up and running again. Don't miss this golden opportunity to chat with the likes of Dr. Dorn, Aunty John and the Hairy Hacker.

EASY ACCESS

Catch up on all the latest CPC gossip on our special sub-board and if you have any 10-liners or listings you think should be in the mag, send them by modem. For those who don't know, the Focal Point number is 01 828 1577.

CRIME...



BATMAN

is a shadow in the darkness, as elusive as a dream. High above the seamy streets of GOTHAM, he is a criminal's nightmare. The only hope for a desperate city...

BATMAN[TM]

A LEGEND HAS RETURNED

THE FASTEST, MOST THRILLING 3D DRIVING GAME YET!

Take the wheel of your turbo-charged Porsche as you and your partner go in pursuit of dangerous criminals all driving an evil array of souped-up roadsters.

TURBO BOOST!

Need to catch up in a hurry? Well, just one press of your Turbo Button will leave your eyes in the back of your head!

BARRELLING THROUGH THE CITY STREETS,

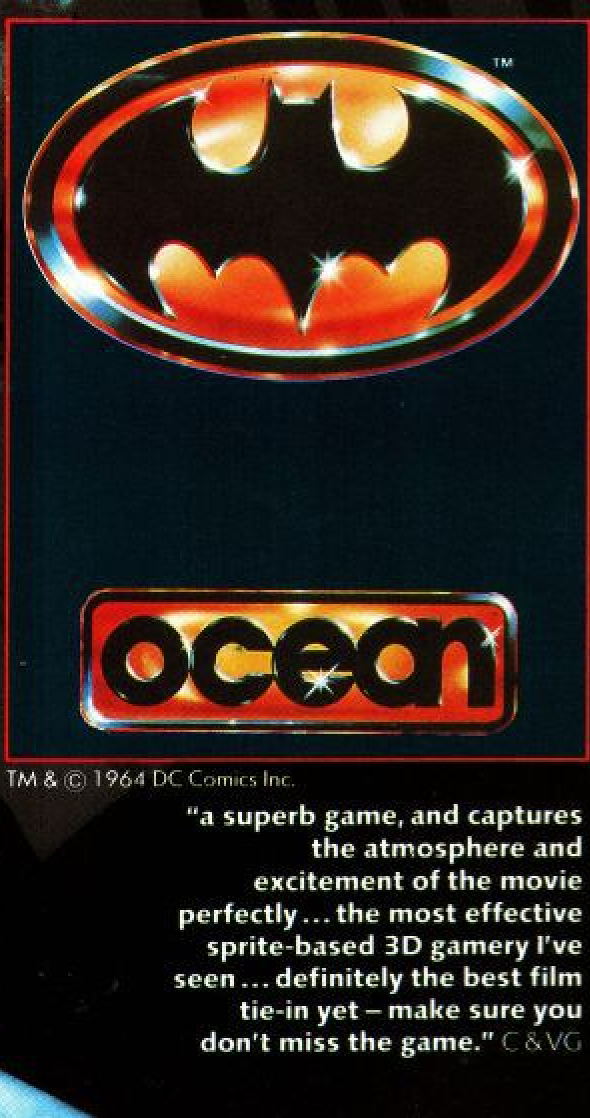
along the roughest of dirt tracks and through busy tunnels – if you can hold the line! The low life can run, but they can't hide...













"a superb game, and captures the atmosphere and excitement of the movie perfectly... the most effective sprite-based 3D gamery I've seen... definitely the best film tie-in yet – make sure you don't miss the game." C&VG

FIGHT IT YOURSELF



TWICE
THE ACTION
THE FUN
THE CHALLENGE

ROY ADAM IS BACK!

The Hi-jack report came from a DC10 leaving Paris for Boston – Arab guerillas were in control of flight 102 and had turned the aircraft towards Africa . . . The plane lands in hostile territory and the terrorists begin their demands . . .

USE THE LASERSIGHT

or the bulletproof vest, but watch out for

AIR-TO-GROUND MISSILES

Operation Thunderbolt the incredible Taito coin-op conversion brought NOW to your home computer.

SIX INSPIRED

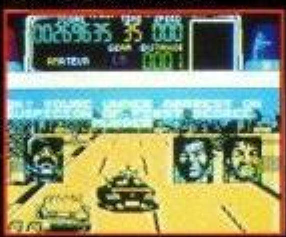
action sequences put you in control of Elliot Ness's elite squad of crime-busters.

ALLEYWAY SHOOTOUTS, THE BORDER RAID,

The Railway Station confrontation and Warehouse bust culminating in the thrilling denouement of a

ROOFTOP DUEL

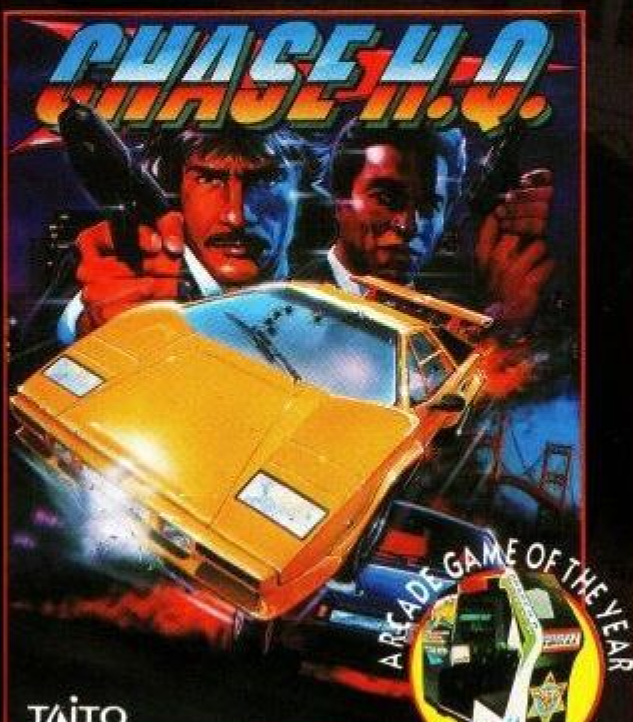
as you re-live the knife edge existence of Ness in his struggle against the retribution of Capone!

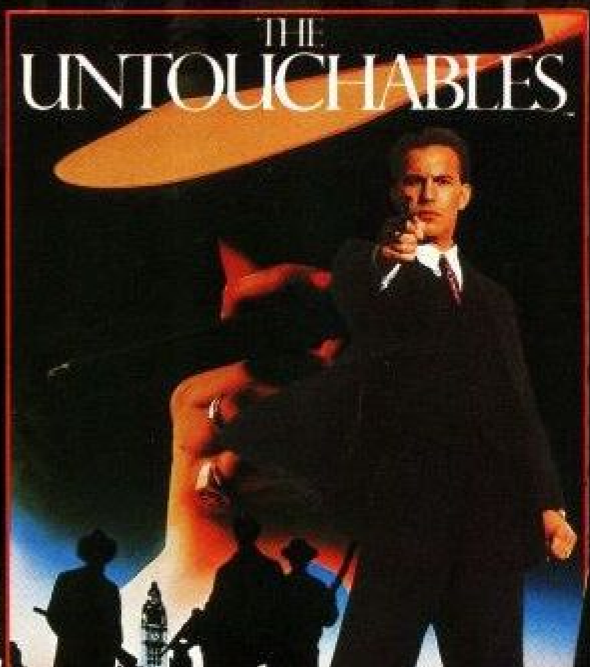












"a fine example of how to do the job properly . . . a cracking conversion . . . easily one of the most successful licences to date" Sinclair User

NOW FOR YOUR

SPECTRUM **ATARI ST**
AMSTRAD **AMIGA**
COMMODORE

VALUE ▶ DIRECT LINES ▶ QUALITY ▶ DIRECT LINES ▶ OFFERS

SERVICE ▶ DIRECT LINES ▶ EXCLUSIVITY ▶ VALUE ▶ OFFERS

AMSTRAD USER CLUB

It pays to belong!

DIRECT LINES

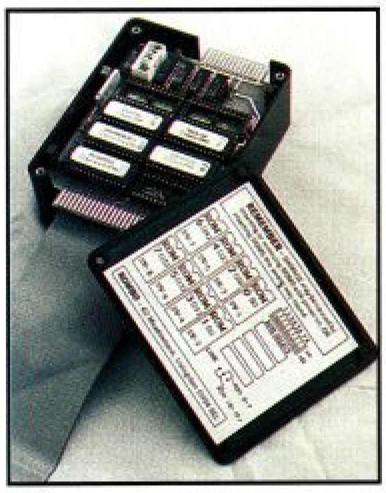
THE LATEST IN PRINT — MT81

The NT 81 is the ideal printer for home, educational and small business use. It prints at a speed of 130 cps and 26 cps in NLQ mode. It has a flexible and simple paper handling facility with instant access to continuous stationery and friction feed, allowing cut-sheets to be loaded while the continuous paper is parked in the tractors. Designed for workloads of up to 2,000 pages per month, the MT81 is the ultimate in quality and reliability for low-cost matrix printing.



RRP FMT81 Special ACU Price £165.85. MEMBERS £39.95. Order Code FMT81.

Box Clever With The ROMBO ROM Box



Expand your CPC with this compact 8 socket ROM box. Keep up to 8 programs instantly accessible, CPC6128 Users can double up for an instant library of 16 programs!

With ROM based software you can eliminate all of the hazards of using tapes and discs; no loading time is required, no danger of corruption and the optimal memory space is left free.

ROMBO has a standard through connector so it will not restrict the use of other peripherals with your CPC, and it will accept 200ns or 250ns EPROMS.

Normally £34.95, ACU Price £30.95. MEMBERS £29.95.
Order Code ROMB00003.

ON FORM

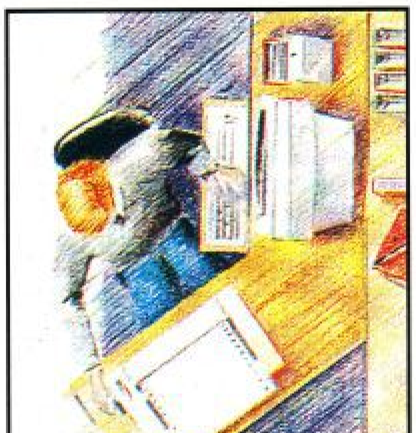
FORM MASTER? is the latest computerised race form predictor. No calculations or expertise are required for Form Master to produce a high percentage of winners and profits. Both Flat and National Hunt seasons are supplied in this one package. It is easy to use and comes complete with a step by step guide that leads your through the system. Just answer the questions and Form Master will help you to pick the winners!

Normally £49.95. ACU £43.95. MEMBERS £39.95.

Order Code FFORM0001.

MINI OFFICE II

The combined word processor, database, spreadsheet, label printer, communications and graphics package. Ideal for the small business user, or anyone wanting a wide range of applications.



Each Module is fully menu driven and easy to use and is an excellent starter pack for any new CPC user.

Tape RRP £14.95.

ACU £11.45.

MEMBERS £10.95.

Order Code MINI001.

Tune In With The MP-3



For the best in-home entertainment, the Amstrad MP-3 transforms your colour monitor into a colour TV. It sits neatly under the CPC colour monitor for you to receive all of your favourite TV programmes.

Normally £29.95. This month's SPECIAL ACU PRICE £29.95. MEMBERS £24.95.
Order Code FMP3.

▶ DIRECT LINES ▶ EXCLUSIVITY ▶ DIRECT LINES ▶ SERVICE ▶

▶ QUALITY ▶ DIRECT LINES ▶ VALUE ▶ DIRECT LINES ▶ DIRE

'MUCH ADO ABOUT SHAKESPEARE'

This month ACU prepares to take on the educational market, looking at the wide range of software available to turn your CPC into a fun educational tool.

To get you in the mood, Direct Lines has on offer the works of Shakespeare on disc. Each package contains an entire play, stored as an ASCII text file, which can be read into most PC's. The power of your CPC can be utilised to take the tedium out of text analysis. Key words can be selected, comments can be added, passages can be quickly selected and vocabulary and speeches can be compared, and a hard copy can be produced at any time. All you need to revolutionise your revision!

Normally £28.75, each package is available from Direct Lines for only £25.75 and only £24.75 to User Club Members.

Anthony & Cleopatra	FAMSD01
Hamlet	FAMSD02
Julius Caesar	FAMSD03
Macbeth	FAMSD04
Othello	FAMSD06
Romeo & Juliet	FAMSD07
As You Like It	FAMSD08
A Comedy of Errors	FAMSD09
Merchant of Venice	FAMSD10
Midsummer Night's Dream	FAMSD11
Much Ado About Nothing	FAMSD12
Taming Of The Shrew	FAMSD13
The Tempest	FAMSD14
Twelfth Night	FAMSD15
Richard II	FAMSD16
Henry IV Part 1	FAMSD17
Henry IV Part 2	FAMSD18
Henry V	FAMSD19
Richard III	FAMSD20

Nirvana Disc Manager

The complete disc management system. Not only does it let you organise your data, with facilities to copy, rename and erase files, it can also save your life! Well, maybe not quite — but it will retrieve that vital file that has accidentally been erased!

Nirvana Disc £15.00. MEMBERS £14.00. Order Code FNIRV001.

Speech Synthesizer

Make your CPC answer back! You can even incorporate speech into your own programs, as well as making use of the talking spell check and dictionary provided.

Order Code SPEECH01 (tape only) £9.95. ACU £5.45. Members £4.95.

JOIN THE AMSTRAD USER CLUB

the specialist support company for Amstrad Computer Users. We are the largest organisation of our kind with membership currently standing at 30,000 and open to anyone resident in the U.K.

Enjoy the benefits:

- on-line technical support
- 24 hour sales line for discounted hardware and software
- priority subscription to the Official Amstrad Magazine
- monthly news letter and price lists including the latest release
- special members only offers
- all for only £27.95 inc VAT – **what are you waiting for?**

Priority Order Form

Membership Number (where applicable) ....

Name: Mr/Mrs/Miss Initials .... Surname ....

Company Name (where applicable) ....

Address ....

....

.... Postcode ....

Daytime phone number ....

Computer model number ....

Please send Cheque/Eurocheque/Postal Order made payable to: **Amstrad User Club**

Access/Mastercard/Eurocard/Barclaycard/Visa

□□□□/□□□□/□□□□/□□□□ Expiry Date: ___ / ___

Signature of card holder ....

Code	Description	Qty	Unit Cost	Total

Total ....

Send to: **Amstrad User Club, PO Box 10, PRE Complex, Pallion Industrial Estate, Sunderland, SR4 6SN.**

Offer closes: 30th June, 1990.

Prices include VAT and delivery within the U.K. mainland.

Overseas despatch on application.

Please allow up to 28 days for delivery.

A9

☎ ORDER HOTLINE 091 510 8787 (23 Lines)

24 Hour Orderline

Faxline
091 510 0155

EMAIL/Telecom Gold
MAG 90320(72)

AMSTRAD USER CLUB

It pays to belong!



MANY LAUGH IN THE FACE OF DANGER
BUT QUAKE IN THE SHADOW OF
SLY SPY SECRET AGENT